

October 15, 2003

STATE OF UTAH

DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF SOLID AND HAZARDOUS WASTE

**Solid Waste Permitting and Management Rules
R315-301 Through 320**

UTAH ADMINISTRATIVE CODE



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UTAH SOLID AND HAZARDOUS WASTE CONTROL BOARD
UTAH SOLID WASTE PERMITTING AND MANAGEMENT RULES

UTAH ADMINISTRATIVE CODE

(R315-301 through 320)

Revised as of:

October 15, 2003

UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY

DIVISION OF SOLID AND HAZARDOUS WASTE

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www.hazardouswaste.utah.gov/sws.htm

R315. Environmental Quality, Solid and Hazardous Waste.

R315-301. Solid Waste Authority, Definitions, and General Requirements.

R315-301-1. Authority and Purpose.

The Solid Waste Permitting and Management Rules are promulgated under the authority of the Solid and Hazardous Waste Act, Chapter 6 of Title 19, to protect human health, to prevent land, air and water pollution, and to conserve the state's natural, economic and energy resources by setting minimum performance standards for the proper management of solid wastes originating from residences, commercial, agricultural, and other sources.

R315-301-2. Definitions.

Terms used in Rules R315-301 through R315-320 are defined in Sections 19-1-103 and 19-6-102. In addition, for the purpose of Rules R315-301 through 320, the following definitions apply.

(1) "Active area" means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being conducted.

(2) "Airport" means a public-use airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.

(3) "Aquifer" means a geological formation, group of formations, or portion of a formation that contains sufficiently saturated permeable material to yield useable quantities of ground water to wells or springs.

(4) "Areas susceptible to mass movement" means those areas of influence, characterized as having an active or substantial possibility of mass movement, where the movement of earth material at, beneath, or adjacent to the landfill unit, because of natural or human-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include landslides, avalanches, debris slides and flows, soil fluction, block sliding, and rock falls.

(5) "Asbestos Waste" means friable asbestos, which is any material containing more than 1% asbestos as determined using the method specified in Appendix A, 40 CFR Part 763.1, 2001 ed., which is adopted and incorporated by reference, that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

(6) "Background concentration" means the concentration of a contaminant in ground water upgradient or a lateral hydraulically equivalent point from a facility, practice, or activity, and which has not been affected by that facility, practice, or activity.

(7) "Class I Landfill" means a non-commercial landfill or a landfill solely under contract with a local government taking municipal solid waste generated within the boundaries of the local government that is permitted by the Executive Secretary to receive for disposal:

(a) municipal solid waste;

(b) any other nonhazardous solid waste, not otherwise limited by rule or solid waste permit; and

(c) in conjunction with municipal solid waste or other nonhazardous solid waste, waste from a conditionally exempt small quantity generator of hazardous waste, as defined by Section R315-2-5.

(8) "Class II Landfill" means a non-commercial landfill or a landfill solely under contract with a local government taking municipal solid waste generated within the boundaries of the local government that is permitted by the Executive Secretary to receive for disposal:

(a) municipal solid waste;

(b) any other nonhazardous solid waste, not otherwise limited by rule or solid waste permit; and

(c) in conjunction with municipal solid waste or other nonhazardous solid waste, waste from a conditionally exempt small quantity generator of hazardous waste, as defined by Section R315-2-5.

(d) A Class II Landfill receives, on a yearly average, 20 tons, or less, of solid waste per day.

(9) "Class III Landfill" means a non-commercial landfill that is permitted by the Executive Secretary to receive for disposal only industrial solid waste.

(10) "Class IV Landfill" means a non-commercial landfill that is permitted by the Executive Secretary to receive for disposal only:

(a) construction/demolition waste;

(b) yard waste;

(c) inert waste;

(d) dead animals, as approved by the Executive Secretary and upon meeting the requirements of Section R315-315-6;

(e) waste tires and materials derived from waste tires, upon meeting the requirements of Section 19-6-804 and Section R315-320-3; and

(f) petroleum contaminated soils, upon meeting the requirements of Subsection R315-315-8(3).

(11) "Class V Landfill" means a commercial nonhazardous solid waste disposal facility, as defined by Subsection 19-6-102(3), that is permitted by the Executive Secretary to receive for disposal:

(a) municipal solid waste;

(b) any other nonhazardous solid waste, not otherwise limited by rule or solid waste permit; and

(c) in conjunction with municipal solid waste or other nonhazardous solid waste, waste from a conditionally exempt small quantity generator of hazardous waste, as defined by Section R315-2-5.

(12) "Class VI Landfill" means a commercial nonhazardous solid waste landfill that is permitted by the Executive Secretary to receive for disposal only:

(a) construction/demolition waste, excluding waste from a conditionally exempt small quantity generator of hazardous waste, as defined by Section R315-2-5;

(b) yard waste;

(c) inert waste;

(d) dead animals, as approved by the Executive Secretary and upon meeting the requirements of Section R315-315-6;

(e) waste tires and materials derived from waste tires, upon meeting the requirements of Section 19-6-804 and Subsection R315-320-3(1) or (2); and

(f) petroleum contaminated soils, upon meeting the requirements of Subsection R315-315-8(3).

(g) A Class VI Landfill may not receive for disposal:

(i) hazardous waste;

(ii) construction/demolition waste containing PCBs except as allowed by Section R315-315-7;

(iii) garbage;

(iv) municipal solid waste; or

(v) industrial solid waste.

(h) The wastes received at a Class VI Landfill may be further limited by a solid waste permit.

(i) A Class VI Landfill may not change to a Class V Landfill except by meeting all requirements for a Class V Landfill including obtaining a new Class V Landfill permit and completing the requirements specified in Subsection R315-310-3(2).

(13) "Closed facility" means any facility that no longer receives solid waste and has completed an approved closure plan, and any landfill on which an approved final cover has been installed.

(14) "Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding household waste and industrial wastes.

(15) "Composite liner" means a liner system consisting of two components: the upper component consisting of a synthetic flexible membrane liner, and the lower component consisting of a layer of compacted soil. The composite liner must have the synthetic flexible membrane liner installed in direct and uniform contact with the compacted soil component and be constructed of specified materials and compaction to meet specified permeabilities.

(16) "Composting" means a method of solid waste management whereby the organic component of the waste stream is biologically decomposed under controlled conditions to a state in which the end product or compost can be safely handled, stored, or applied to the land without adversely affecting human health or the environment.

(17) "Construction/demolition waste" means solid waste from building materials, packaging, and rubble resulting from construction, remodeling, repair, abatement, rehabilitation, renovation, and demolition operations on pavements, houses, commercial buildings, and other structures, including waste from a conditionally exempt small quantity generator of hazardous waste, as defined by Section R315-2-5, that may be generated by these operations.

(a) Such waste may include:

(i) concrete, bricks, and other masonry materials;

(ii) soil and rock;

(iii) waste asphalt;

(iv) rebar contained in concrete; and

(v) untreated wood, and tree stumps.

(b) Construction/demolition waste does not include:

(i) asbestos;

(ii) wood treated with creosote or related compounds, Arsenic, Chromium, Copper, or other chemicals or materials to minimize attack or degradation by insects or microorganisms; and

(iii) contaminated soils or tanks resulting from remediation or clean-up at any release or spill.

(18) "Contaminant" means any physical, chemical, biological, or radiological substance or matter in water or soil which is a result of human activity.

(19) "Displaced" or "displacement" means the relative movement of any two sides of a fault measured in any direction.

(20) "Drop box facility" means a facility used for the placement of a large detachable container or drop box for the collection of solid waste for transport to a solid waste disposal facility. The facility includes the area adjacent to the containers for necessary entrance, exit, unloading, and turn-around areas. Drop box facilities normally serve the general public with uncompacted loads and receive waste from off-site. Drop box facilities do not include residential or commercial waste containers on the site of waste generation.

(21) "Energy recovery" means the recovery of energy in a useable form from incineration, burning, or any other means of using the heat of combustion of solid waste that involves high temperature (above 1200 degrees Fahrenheit) processing.

(22) "Existing facility" means any facility that has:

(a) a current valid solid waste permit or other valid approval issued under Rules R315-301 through 320 by the Executive Secretary; and

(b) received final approval to accept waste as required by Subsection R315-301-5(1).

(23) "Expansion of a solid waste disposal facility" means any lateral expansion beyond the property boundaries outlined in the permit application for the current permit under which the facility is operating.

(24) "Facility" means all contiguous land, structures, other appurtenances, and improvements on the land used for treating, storing, or disposing of solid waste. A facility may consist of several treatment, storage, or disposal operational units, e.g., one or more incinerators, landfills, container storage areas, or combinations of these.

(25) "Floodplain" means the land which has been or may be hereafter covered by flood water which has a 1% chance of occurring any given year. The flood is also referred to as the base flood or 100-year flood.

(26) "Free liquids" means liquids which readily separate from the solid portion of a waste under ambient temperature and pressure or as determined by EPA test method 9095 (Paint Filter Liquids Test) as provided in EPA Report SW-846 "Test Methods for Evaluating Solid Waste" as revised December (1996) which is adopted and

incorporated by reference.

(27) "Garbage" means discarded animal and vegetable wastes and animal and vegetable wastes resulting from the handling, preparation, cooking and consumption of food, and of such a character and proportion as to be capable of attracting or providing food for vectors. Garbage does not include sewage and sewage sludge.

(28) "Ground water" means subsurface water which is in the zone of saturation including perched ground water.

(29) "Ground water quality standard" means a standard for maximum allowable contamination in ground water as set by Section R315-308-4.

(30) "Hazardous waste" means hazardous waste as defined by Subsection 19-6-102(9) and Section R315-2-3.

(31) "Holocene fault" means a fracture or zone of fractures along which rocks on one side of the fracture have been displaced with respect to those on the other side, which has occurred in the most recent epoch of the Quaternary period extending from the end of the Pleistocene, approximately 11,000 years ago, to the present.

(32) "Household size" means a container for a material or product that is normally and reasonably associated with households or household activities. The containers are of a size and design to hold materials or products generally for immediate use and not for storage, five gallons or less in size.

(33) "Household waste" means any solid waste, including garbage, trash, and sanitary waste in septic tanks, derived from households including single and multiple residences, hotels, motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas.

(34) "Incineration" means a controlled thermal process by which solid wastes are physically or chemically altered to gas, liquid, or solid residues which are also regulated solid wastes and includes the thermal destruction of solid waste for energy recovery. Incineration does not include smelting operations where metals are reprocessed or the refining, processing, or the burning of used oil for energy recovery as described in Rule R315-15.

(35) "Industrial solid waste" means any solid waste generated at a manufacturing or other industrial facility that is not a hazardous waste or that is a hazardous waste from a conditionally exempt small quantity generator of hazardous waste, as defined by Section R315-2-5, generated by an industrial facility. Industrial solid waste includes waste resulting from the following manufacturing processes and associated activities: electric power generation; fertilizer or agricultural chemicals; food and related products or by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing or foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include

mining waste; oil and gas waste; or other waste excluded by Subsection 19-6-102(17)(b).

(36) "Industrial solid waste facility" means a facility which receives only industrial solid waste from on-site or off-site sources for disposal.

(37) "Inert waste" means noncombustible, nonhazardous solid wastes that retain their physical and chemical structure under expected conditions of disposal, including resistance to biological or chemical attack.

(38) "Landfill" means a disposal facility where solid waste is placed in or on the land and which is not a landtreatment facility or surface impoundment.

(39) "Landtreatment, landfarming, or landspreading facility" means a facility or part of a facility where solid waste is applied onto or incorporated into the soil surface for the purpose of biodegradation.

(40) "Lateral expansion of the solid waste disposal area" means:

(a) any horizontal expansion of the waste boundaries of an existing landfill cell, module, or unit;

(b) the construction of a new cell, module, or unit within the boundaries outlined in the permit application of the current permit under which the facility is operating; or

(c) any horizontal expansion not consistent with past normal operating practices.

(41) "Lateral hydraulically equivalent point" means a point located hydraulically equal to a facility and in the same ground water with similar geochemistry such that the ground water, at that point, has not been affected by the facility.

(42) "Leachate" means a liquid that has passed through or emerged from solid waste and may contain soluble, suspended, miscible, or immiscible materials removed from such waste.

(43) "Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include human-made materials, such as fill, concrete and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

(44) "Lower explosive limit" means the lowest percentage by volume of a mixture of explosive gases which will propagate a flame in air at 25 degrees Celsius (77 degrees Fahrenheit) and atmospheric pressure.

(45) "Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90% or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on site specific seismic risk assessment.

(46) "Municipal solid waste landfill" means a permitted nonhazardous solid waste landfill that may receive municipal solid waste for disposal.

(47) "Municipal solid waste" means household waste, nonhazardous commercial solid waste, and non-

hazardous sludge.

(48) "New facility" means any facility that:

(a) has applied for a permit under Rules R315-301 through 320;

(b) did not have a permit under Rules R315-301 through 320 at the time of the application; and

(c) has not received final approval to accept waste as required by Subsection R315-301-5(1).

(49) "Off-site" means any site which is not on-site.

(50) "On-site" means the same or geographically contiguous property which may be divided by public or private right-of-way, provided that the entrance and exit between the properties is at a cross-roads intersection, and access is by crossing, as opposed to going along the right-of-way. Property separated by a private right-of-way, which the site owner or operator controls, and to which the public does not have access, is also considered on-site property.

(51) "Operator" means the person, as defined by Subsection 19-1-103(4), responsible for the overall operation of a facility.

(52) "Owner" means the person, as defined by Subsection 19-1-103(4), who owns a facility or part of a facility.

(53) "PCB" or "PCBs" means any chemical substance that is limited to the biphenyl molecule that has been chlorinated to varying degrees or any combination of materials which contain such substances.

(54) "Permeability" means the ease with which a porous material allows water and the solutes contained therein to flow through it. This is usually expressed in units of centimeters per second (cm/sec) and termed hydraulic conductivity. Soils and synthetic liners with a permeability for water of 1×10^{-7} cm/sec or less may be considered impermeable.

(55) "Permit" means the plan approval as required by Subsection 19-6-108(3)(a), or equivalent control document issued by the Executive Secretary to implement the requirements of the Utah Solid and Hazardous Waste Act.

(56) "Pile" means any noncontainerized accumulation of solid waste that is used for treatment or storage.

(57) "Poor foundation conditions" means those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of a landfill unit.

(58) "Putrescible" means organic material subject to decomposition by microorganisms.

(59) "Qualified ground water scientist" means a scientist or engineer who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in ground water hydrology and related fields as may be demonstrated by state registration, professional certification, or completion of accredited university programs that enable that individual to make sound professional judgements regarding ground water monitoring, contaminant fate and transport, and corrective

action.

(60) "Recycling" means extracting valuable materials from the waste stream and transforming or remanufacturing them into usable materials that have a demonstrated or potential market.

(a) Recycling does not include processes that generate such volumes of material that no market exists for the material.

(b) Any part of the waste stream entering a recycling facility and subsequently returned to a waste stream or disposed has the same regulatory designation as the original waste.

(c) Recycling includes the substitution of nonhazardous solid waste fuels for conventional fuels (such as coal, natural gas, and petroleum products) for the purpose of generating the heat necessary to manufacture a product.

(61) "Recyclable materials" means those solid wastes that can be recovered from or otherwise diverted from the waste stream for the purpose of recycling, such as metals, paper, glass, and plastics.

(62) "Run-off" means any rainwater, leachate, or other liquid that has contacted solid waste and drains over land from any part of a facility.

(63) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto the active area of a facility.

(64) "Scavenging" means the unauthorized removal of solid waste from a facility.

(65) "Seismic impact zone" means an area with a 10% or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in 250 years.

(66) "Septage" means a semisolid consisting of settled sewage solids combined with varying amounts of water and dissolved materials generated from septic tank systems.

(67) "Sharps" means any discarded or contaminated article or instrument from a health facility that may cause puncture or cuts. Such waste may include needles, syringes, blades, needles with attached tubing, pipettes, pasteurs, broken glass, and blood vials.

(68) "Sludge" means any solid, semisolid, or liquid waste, including grit and screenings generated from a:

(a) municipal, commercial, or industrial waste water treatment plant;

(b) water supply treatment plant;

(c) car wash facility;

(d) air pollution control facility; or

(e) any other such waste having similar characteristics.

(69) "Solid waste disposal facility" means a facility or part of a facility at which solid waste is received from on-site or off-site sources and intentionally placed into or on land and at which waste, if allowed by permit, may remain after closure. Solid waste disposal facilities include landfills, incinerators, and land treatment areas.

(70) "Solid waste incinerator facility" means a facility at which solid waste is received from on-site or off-site sources and is subjected to the incineration process. An incinerator facility that incinerates solid waste for any reason, including energy recovery, volume reduction, or to render it non-infectious, is a solid waste incinerator facility and is subject to Rules R315-301 through 320.

(71) "Special waste" means discarded solid waste that may require special handling or other solid waste that may pose a threat to public safety, human health, or the environment. Special waste may include:

- (a) ash;
- (b) automobile bodies;
- (c) furniture and appliances;
- (d) infectious waste;
- (e) waste tires;
- (f) dead animals;
- (g) asbestos;
- (h) waste exempt from the hazardous waste

regulations under Section R315-2-4;

(i) conditionally exempt small quantity generator hazardous waste as defined by Section R315-2-5;

- (j) waste containing PCBs;
- (k) petroleum contaminated soils;
- (l) waste asphalt; and
- (m) sludge.

(72) "State" means the State of Utah.

(73) "Structural components" means liners, leachate collection systems, final covers, run-on or run-off systems, and any other component used in the construction and operation of a landfill that is necessary for the protection of human health and the environment.

(74) "Surface impoundment or impoundment" means a facility or part of a facility which is a natural topographic depression, human-made excavation, or diked area formed primarily of earthen materials, although it may be lined with synthetic materials, which is designed to hold an accumulation of liquid waste or waste containing free liquids, and which is not an injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

(75) "Transfer station" means a permanent, fixed, supplemental collection and transportation facility that is staffed by a minimum of one employee of the owner or operator during hours of operation and is used by persons and route collection vehicles to deposit collected solid waste from off-site into a larger transfer vehicle for transport to a solid waste handling or disposal facility.

(76) "Transport vehicle" means a vehicle capable of hauling large amounts of solid waste such as a truck, packer, or trailer that may be used by refuse haulers to transport solid waste from the point of generation to a transfer station or a disposal facility.

(77) "Twenty-five year storm" means a 24-hour storm of such intensity that it has a 4% probability of being equaled or exceeded any given year. The storm could result in what is referred to as a 25-year flood.

(78) "Unit boundary" means a vertical surface located at the hydraulically downgradient limit of a landfill unit or other solid waste disposal facility unit which is required to monitor ground water. This vertical surface extends down into the ground water.

(79) "Unstable area" means a location that is susceptible to natural or human induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a facility. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

(80) "Vadose zone" means the zone of aeration including soil and capillary water. The zone is bound above by the land surface and below by the water table.

(81) "Vector" means a living animal including insect or other arthropod which is capable of transmitting an infectious disease from one organism to another.

(82) "Washout" means the carrying away of solid waste by waters of a base or 100-year flood.

(83) "Waste tire storage facility" or "waste tire pile" means any site where more than 1,000 waste tires or 1,000 passenger tire equivalents are stored on the ground.

(a) A waste tire storage facility includes:

- (i) whole waste tires used as a fence;
- (ii) whole waste tires used as a windbreak; and
- (iii) waste tire generators where more than 1,000 waste tires are held.

(b) A waste tire storage facility does not include:

(i) a site where waste tires are stored exclusively in buildings or in trailers;

(ii) if whole waste tires are stored for five or fewer days, the site of a registered tire recycler or a processor for a registered tire recycler;

(iii) a permitted solid waste disposal facility that stores whole tires in piles for not longer than one year;

(iv) a staging area where tires are temporarily placed on the ground, not stored, to accommodate activities such as sorting, assembling, or loading or unloading of trucks; or

(v) a site where waste tires or material derived from waste tires are stored for five or fewer days and are used for ballast to maintain covers on agricultural materials or to maintain covers at a construction site or are to be recycled or applied to a beneficial use.

(c) Tires attached to a vehicle are not considered waste tires until they are removed from the vehicle.

(84) "Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(85) "Yard waste" means vegetative matter resulting from landscaping, land maintenance, and land clearing operations including grass clippings, prunings, and

other discarded material generated from yards, gardens, parks, and similar types of facilities. Yard waste does not include garbage, paper, plastic, processed wood, sludge, septage, or manure.

R315-301-3. Owner Responsibilities for Solid Waste.

The owner, operator or occupant of any premises or business establishment shall be responsible for the management and disposal of all solid waste generated or accumulated by the owner, operator, or occupant of the property in compliance with the Utah Solid Waste Permitting and Management Rules and the Utah Solid and Hazardous Waste Act.

R315-301-4. Prohibition of Illegal Disposal or Incineration of Solid Waste.

(1) No person shall incinerate, burn, or otherwise dispose of any solid waste in any place except at a facility which is in compliance with the requirements of Rules R315-301 through 320 and other applicable rules.

(2) When deposition or disposal of the following materials does not cause a hazard to human health or the environment or cause a public nuisance, the requirements of Rules R315-301 through 320 do not apply to:

- (a) inert waste used as fill material;
- (b) the disposal of mine tailings and overburden;
- (c) the disposal of vegetative material generated as a result of land clearing; or
- (d) the disposal of vegetative agricultural waste.

R315-301-5. Permit Required.

(1) No solid waste disposal facility shall be established, operated, maintained, or expanded until the owner or operator of such facility has obtained a permit from the Executive Secretary and has received a letter of approval to accept waste from the Executive Secretary.

(2) The owner or operator of a solid waste disposal facility shall operate the facility in accordance with the conditions of the permit and otherwise follow the permit.

(3) In areas where no public or duly licensed disposal service is available, the on-site disposal of on-site generated nonhazardous solid waste from a single family farm or a single family ranch does not require a permit.

R315-301-6. Protection of Human Health and the Environment.

(1) The management of solid waste shall not present a threat to human health or the environment.

(2) Any contamination of the ground water, surface water, air, or soil that results from the management of solid waste which presents a threat to human health or the environment shall be remediated through appropriate corrective action.

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R315. Environmental Quality, Solid and Hazardous Waste.

R315-302. Solid Waste Facility Location Standards, General Facility Requirements, and Closure Requirements.

R315-302-1. Location Standards for Disposal Facilities.

(1) Applicability.

(a) These standards apply to:

(i) Class I, II, and V Landfills;

(ii) Class III Landfills as specified in Rule R315-304;

(iii) Class IV and VI Landfills as specified in Rule

R315-305; and

(iv) each new disposal facility and any existing disposal facility seeking facility expansion, including landfills, landtreatment disposal sites, and piles that are to be closed as landfills.

(b) These standards, unless otherwise noted, do not apply to:

(i) an existing facility;

(ii) transfer stations and drop box facilities;

(iii) piles used for storage;

(iv) composting or utilization of sludge or other solid waste on land; or

(v) hazardous waste disposal sites regulated by Rules R315-1 through R315-50 and Rule R315-101.

(2) Location Standards. Each applicable solid waste facility shall be subject to the following location standards.

(a) Land Use Compatibility. No new facility shall be located within:

(i) one thousand feet of a national, state or county park, monument, or recreation area; designated wilderness or wilderness study area; or wild and scenic river area;

(ii) ecologically and scientifically significant natural areas, including wildlife management areas and habitat for threatened or endangered species as designated pursuant to the Endangered Species Act of 1982;

(iii) farmland classified or evaluated as "prime," "unique," or of "statewide importance" by the U.S. Department of Agriculture Soil Conservation Service under the Prime Farmland Protection Act;

(iv) one-fourth mile of:

(A) existing permanent dwellings, residential areas, and other incompatible structures such as schools or churches unless otherwise allowed by local zoning or ordinance; and

(B) historic structures or properties listed or eligible to be listed in the State or National Register of Historic Places;

(v) ten thousand feet of any airport runway end used by turbojet aircraft or within 5,000 feet of any airport runway end used by only piston-type aircraft unless the owner or operator demonstrates that the facility design and operation will not increase the likelihood of bird/aircraft collisions. Every new and existing disposal facility is subject to this requirement. If a new landfill or a lateral expansion of an existing landfill is located within five miles of an airport runway end, the owner or operator must notify the effected airport and the Federal Aviation Administration; or

(vi) areas with respect to archeological sites that would

violate Section 9-8-404.

(b) Geology. No new facility or lateral expansion of an existing facility shall be located in a subsidence area, a dam failure flood area, above an underground mine, above a salt dome, above a salt bed, or on or adjacent to geologic features which could compromise the structural integrity of the facility.

(i) Fault Areas. A new facility or a lateral expansions of an existing facility shall not be located within 200 feet of a Holocene fault unless the owner or operator demonstrates to the Executive Secretary that an alternative setback distance of less than 200 feet will prevent damage to the structural integrity of the unit and will be protective of human health and the environment.

(ii) Seismic Impact Zones. A new facility or a lateral expansion of an existing facility shall not be located in seismic impact zones unless the owner or operator demonstrates to the satisfaction of the Executive Secretary that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

(iii) Unstable Areas. The owner or operator of an existing facility, a lateral expansion of an existing facility, or a new facility located in an unstable area must demonstrate to the satisfaction of the Executive Secretary that engineering measures have been incorporated into the facility design to ensure that the integrity of the structural components of the facility will not be disrupted. The owner or operator must consider the following factors when determining whether an area is unstable:

(A) on-site or local soil conditions that may result in significant differential settling;

(B) on-site or local geologic or geomorphologic features; and

(C) on-site or local human-made features or events, both surface and subsurface.

(c) Surface Water.

(i) No new facility or lateral expansion of an existing facility shall be located on any public land that is being used by a public water system for water shed control for municipal drinking water purposes, or in a location that could cause contamination to a lake, reservoir, or pond.

(ii) Floodplains. No new or existing facility shall be located in a floodplain unless the owner or operator demonstrates to the Executive Secretary that the unit will not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in a washout of solid waste so as to pose a hazard to human health or the environment.

(d) Wetlands. No new facility or lateral expansion of an existing facility shall be located in wetlands unless the owner or operator demonstrates to the Executive Secretary that:

(i) where applicable under section 404 of the Clean Water Act or applicable state wetlands laws, the presumption that a practicable alternative to the proposed

landfill is available which does not involve wetlands is clearly rebutted;

(ii) the unit will not violate any applicable state water quality standard or section 307 of the Clean Water Act;

(iii) the unit will not jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of a critical habitat protected under the Endangered Species Act of 1973;

(iv) the unit will not cause or contribute to significant degradation of wetlands. The owner or operator must demonstrate the integrity of the unit and its ability to protect ecological resources by addressing the following factors:

(A) erosion, stability, and migration potential of native wetland soils, muds, and deposits used to support the unit;

(B) erosion, stability, and migration potential of dredged and fill materials used to support the unit;

(C) the volume and chemical nature of the waste managed in the unit;

(D) impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(E) the potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(F) any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected;

(v) to the extent required under section 404 of the Clean Water Act or applicable state wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands, as defined by acreage and function, by first avoiding impacts to wetlands to the maximum extent practicable, as required by Subsection R315-302-1(2)(d)(i), then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands); and

(vi) sufficient information is available to make a reasonable determination with respect to these demonstrations.

(e) Ground Water.

(i) No new facility or lateral expansion of an existing facility shall be located at a site:

(A) where the bottom of the lowest liner is less than five feet above the historical high level of ground water; or

(B) for a landfill that is not required to install a liner, the lowest level of waste must be at least ten feet above the historical high level of ground water.

(C) If the aquifer beneath a landfill contains ground water which has a Total Dissolved Solids (TDS) of 10,000 mg/l or greater and the landfill is constructed with a composite liner, the bottom of the lowest liner may be less than five feet above the historical high level of the ground water.

(ii) No new facility shall be located over a sole source aquifer as designated in 40 CFR 149.

(iii) No new facility shall be located over groundwater

classified as IB under Section R317-6-3.3.

(iv) Unless all units of the proposed facility are constructed with a composite liner or other equivalent design approved by the Executive Secretary:

(A) a new facility located above any aquifer containing ground water which has a TDS content below 1,000 mg/l which does not exceed applicable ground water quality standards for any contaminant is permitted only where the depth to ground water is greater than 100 feet; or

(B) a new facility located above any aquifer containing ground water which has a TDS content between 1,000 and 3,000 mg/l and does not exceed applicable ground water quality standards for any contaminant is permitted only where the depth to ground water is 50 feet or greater.

(C) The applicant for the proposed facility will make the demonstration of ground water quality necessary to determine the appropriate aquifer classification.

(v) No new facility shall be located in designated drinking water source protection areas or, if no source protection area is designated, within a distance to existing drinking water wells or springs for public water supplies of 250 days ground water travel time. This requirement does not include on-site operation wells. The applicant for the proposed facility will make the demonstration, acceptable to the Executive Secretary, of hydraulic conductivity and other information necessary to determine the 250 days ground water travel distance.

(vi) Ground Water Exception. Subject to the ground water performance standard stated in Subsection R315-303-3(1), if a solid waste disposal facility is to be located over an area where the ground water has a TDS of 10,000 mg/l or greater, or where there is an extreme depth to ground water, or where there is a natural impermeable barrier above the ground water, or where there is no ground water, the Executive Secretary may exempt the disposal site, on a site specific basis, from some design criteria and ground water monitoring. Exemption of ground water monitoring may require the owner or operator to make the demonstration stated in Subsection R315-308-1(3).

(3) Exemptions. Exemptions from the location standards with respect to airports, floodplains, wetlands, fault areas, seismic impact zones, and unstable areas cannot be granted. Exemptions from other location standards of this section may be granted by the Executive Secretary on a site specific basis if it is determined that the exemption will cause no adverse impacts to public health or the environment.

(a) No exemption may be granted without application to the Executive Secretary.

(b) If an exemption is granted, a facility may be required to have more stringent design, construction, monitoring program, or operational practice to protect human health or the environment.

(c) All applications for exemptions shall meet the conditions of Section R315-311-3 pertaining to public notice and comment period.

R315-302-2. General Facility Requirements.

(1) Applicability.

(a) Each new and existing solid waste facility for which a permit is required by Section R315-310-1, shall meet the requirements of Section R315-302-2.

(b) Any facility which stores waste in piles that is subject to the requirements of Rule R315-314 shall meet the applicable requirements of Section R315-302-2.

(c) Any recycling facility or composting facility subject to the standards of Rule R315-312 shall submit a plan of operation, to the Executive Secretary, that demonstrates compliance with the applicable standards of Section R315-302-2 and Rule R315-312.

(i) The submitted plan of operation shall be reviewed to determine compliance with the applicable standards of Section R315-302-2 and Rule R315-312.

(ii) Prior to the acceptance of waste or recyclable material or beginning operations at the facility, the owner or operator of a recycling or composting facility must receive notice from the Executive Secretary that the plan of operation meets the applicable standards of Section R315-302-2 and Rule R315-312.

(d) The requirements of Section R315-302-2 apply to industrial solid waste facilities as specified in Rule R315-304.

(2) Plan of Operation. Each owner or operator shall develop, keep on file, and abide by a plan of operation approved by the Executive Secretary. The plan shall describe the facility's operation and shall convey to site operating personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the Executive Secretary or his authorized representative. The facility must be operated in accordance with the plan or the plan must be so modified with the approval of the Executive Secretary, to allow the facility to operate in accordance with an approved plan. Each plan of operation shall include:

(a) an intended schedule of construction. Facility plan approvals will be reviewed by the Executive Secretary no later than 18 months after the permit is issued and periodically thereafter, to determine if the schedule of construction is reasonably being followed. Failure to comply with the schedule of construction may result in revocation of the plan approval;

(b) a description of on-site solid waste handling procedures during the active life of the facility;

(c) a schedule for conducting inspections and monitoring for the facility;

(d) contingency plans in the event of a fire or explosion;

(e) corrective action programs to be initiated if ground water is contaminated;

(f) contingency plans for other releases, e.g. release of explosive gases or failure of run-off containment system;

(g) a plan to control fugitive dust generated from roads, construction, general operations, and covering the waste;

(h) a plan to control wind-blown litter that includes equipment and methods to contain litter, including a schedule and methods to collect scattered litter in a timely manner;

(i) a description of maintenance of installed equipment including leachate and gas collection systems, and ground water monitoring systems;

(j) procedures for excluding the receipt of prohibited hazardous waste or prohibited waste containing PCBs;

(k) procedures for controlling disease vectors;

(l) a plan for an alternative waste handling or disposal system during periods when the solid waste facility is not able to dispose of solid waste, including procedures to be followed in case of equipment breakdown;

(m) closure and post-closure care plans;

(n) cost estimates and financial assurance as required by Subsection R315-309-2(3);

(o) a landfill operations training plan for site operators; and

(p) other information pertaining to the plan of operation as required by the Executive Secretary.

(3) Recordkeeping. Each owner or operator shall maintain and keep, on-site or at a location approved by the Executive Secretary, the following permanent records:

(a) a daily operating record, to be completed at the end of each day of operation, that shall contain:

(i) the weights, in tons, or volumes, in cubic yards, of solid waste received each day, number of vehicles entering, and if available, the type[s] of wastes received each day;

(ii) deviations from the approved plan of operation;

(iii) training and notification procedures;

(iv) results of ground water and gas monitoring that may be required; and

(v) an inspection log or summary; and

(b) other records to include:

(i) documentation of any demonstration made with respect to any location standard or exemption;

(ii) any design documentation for the placement or recirculation of leachate or gas condensate into the landfill as allowed by Subsection R315-303-3(2)(b);

(iii) closure and post-closure care plans as required by Subsections R315-302-3(4) and (7);

(iv) cost estimates and financial assurance documentation as required by Subsection R315-309-2(3);

(v) any information demonstrating compliance with Class II Landfill requirements if applicable; and

(vi) other information pertaining to operation, maintenance, monitoring, or inspections as may be required by the Executive Secretary.

(4) Reporting.

(a) Each owner or operator of any facility, including a facility performing post-closure care, shall prepare an annual report and place the report in the facility's operating record. The owner or operator of the facility shall submit a copy of the annual report to the Executive

Secretary by March 1 of each year for the most recent calendar year or fiscal year of facility operation.

(b) The annual report shall cover facility activities during the previous year and must include, at a minimum, the following information:

- (i) name and address of the facility;
- (ii) calendar year covered by the report;
- (iii) annual quantity, in tons, of solid waste received;

(iv) estimated in-place density in pounds per cubic yard of solid waste handled for each type of treatment, storage, or disposal facility, including applicable recycling facilities;

(v) the annual update of the required financial assurances mechanism pursuant to Subsection R315-309-2(2);

(vi) results of ground water monitoring and gas monitoring; and

(vii) training programs or procedures completed.

(c) Since the amount of waste received must be reported in tons, the following conversion factors shall be used for waste received that is not weighted on scales.

(i) Municipal solid waste:

(A) Uncompacted - 0.15 tons per cubic yard; and

(B) Compacted (delivered in a compaction vehicle) - 0.30 tons per cubic yard.

(ii) Construction/demolition waste - 0.50 tons per cubic yard.

(iii) Municipal incinerator ash - 0.75 tons per cubic yard.

(iv) Other ash - 1.10 tons per cubic yard.

(v) Waste delivered by a resident in a pickup truck or a single axle trailer - 0.25 tons per vehicle.

(vi) Industrial waste - a reasonable conversion factor, based on site specific data, developed by the owner or operator of the facility.

(d) If an owner or operator of a municipal landfill or a construction/demolition landfill has documented conversion factors that are based on facility specific data, these conversion factors may be used to report the amounts of waste when approved by the Executive Secretary.

(5) Inspections.

(a) The owner or operator shall inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges which may cause or lead to the release of wastes to the environment or to a threat to human health. The owner or operator must conduct these inspections with sufficient frequency, no less than quarterly, to identify problems in time to correct them before they harm human health or the environment. The owner or operator shall keep an inspection log or summary including at least the date and time of inspection, the printed name and handwritten signature of the inspector, a notation of observations made, and the date and nature of any repairs or corrective action. The log or summary must be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least three years from the date of inspection.

Inspection records shall be available to the Executive Secretary or his authorized representative upon request.

(b) The Executive Secretary or any duly authorized officer, employee, or representative of the Board may, at any reasonable time and upon presentation of appropriate credentials, enter any solid waste facility and inspect the property, records, monitoring systems, activities and practices, or solid waste being handled for the purpose of ascertaining compliance with Rules R315-301 through 320 and the approved plan of operation for the facility.

(i) The inspector may conduct monitoring or testing, or collect samples for testing, to verify the accuracy of information submitted by the owner or operator or to ensure that the owner or operator is in compliance. The owner or operator may request split samples and analysis parameters on any samples collected by the inspector.

(ii) The inspector may use photographic equipment, video camera, electronic recording device, or any other reasonable means to record information during any inspection.

(iii) The results of any inspection shall be furnished promptly to the owner or operator of the facility.

(6) Recording with the County Recorder.

Not later than 60 days after certification of closure, the owner or operator of a solid waste disposal facility shall:

(a) submit plats and a statement of fact concerning the location of any disposal site to the county recorder to be recorded as part of the record of title; and

(b) submit proof of record of title filing to the Executive Secretary.

R315-302-3. General Closure and Post-Closure Requirements.

(1) Applicability.

(a) An existing facility, a new facility, or an existing facility seeking lateral expansion shall meet the applicable standards of Section R315-302-3 and shall provide financial assurance for closure and post-closure care costs that meet the requirements of Rule R315-309.

(b) The requirements of Subsections (2), (3), and (4) of this section apply to any solid waste management facility as defined by Subsection 19-6-502(9). The requirements of Subsections (5), (6), and (7) of this section apply to:

(i) Class I, II, IV, V, and VI Landfills;

(ii) Class III Landfills as specified in Rule R315-304; and

(iii) any landtreatment disposal facility.

(2) Closure Performance Standard. Each owner or operator shall close its facility or unit in a manner that:

(a) minimizes the need for further maintenance;

(b) minimizes or eliminates threats to human health and the environment from post-closure escape of solid waste constituents, leachate, landfill gases, contaminated run-off or waste decomposition products to the ground, ground water, surface water, or the atmosphere; and

(c) prepares the facility or unit for the post-closure period.

(3) Closure Plan and Amendment.

(a) Closure may include covering, grading, seeding, landscaping, contouring, and screening. For a transfer station or a drop box facility, closure includes waste removal and decontamination of the site, including soil analysis, ground water analysis, or other procedures as required by the Executive Secretary.

(b) Each owner or operator shall develop, keep on file and abide by a plan of closure required by Subsection R315-302-2(2)(l) which, when approved by the Executive Secretary, will become part of the permit.

(c) The closure plan shall project time intervals at which sequential partial closure, if applicable, is to be implemented and identify closure cost estimates and projected fund withdrawal intervals for the associated closure costs from the approved financial assurance instrument required by Rule R315-309.

(d) The closure plan may be amended if conditions and circumstances justify such amendment. If it is determined that amendment of a facility closure plan is required, the Executive Secretary may direct facility closure activities, in part or whole, to cease until the closure plan amendment has been reviewed and approved by the Executive Secretary.

(e) Each owner and operator shall close the facility or unit in accordance with the approved closure plan and all approved amendments.

(4) Closure Procedures.

(a) Each owner and operator shall notify the Executive Secretary of the intent to implement the closure plan in whole or part, 60 days prior to the projected final receipt of waste at the unit or facility unless otherwise specified in the approved closure plan.

(b) The owner or operator shall commence implementation of the closure plan, in part or whole, within 30 days after receipt of the final volume of waste, or for landfills, when the final elevation is attained in part or all of the facility cell or unit as identified in the approved facility closure plan unless otherwise specified in the approved closure plan. Closure activities shall be completed within 180 days from their starting time. Extensions of the closure period may be granted by the Executive Secretary if justification for the extension is documented by the owner or operator.

(c) When facility closure is completed, each owner and operator shall, within 90 days or as required by the Executive Secretary, submit to the Executive Secretary:

(i) facility or unit closure plans, except for Class IIb, IVb, and VI Landfills, signed by a professional engineer registered in the state of Utah and modified as necessary to represent as-built changes to final closure construction as approved in the closure plan; and

(ii) certification by the owner or operator, and, except for Class IIb, IVb, and VI Landfills, a professional engineer registered in the state of Utah that the site or unit has been closed in accordance with the approved closure plan.

(5) Post-Closure Performance Standard. Each owner or operator shall provide post-closure activities for continued

facility maintenance and monitoring of gases, land, and water for 30 years or as long as the Executive Secretary determines is necessary for the facility or unit to become stabilized and to protect human health and the environment.

(6) Post-Closure Plan and Amendment.

(a) For any disposal facility, except an energy recovery or incinerator facility, post-closure care may include:

(i) ground water and surface water monitoring;

(ii) leachate collection and treatment;

(iii) gas monitoring;

(iv) maintenance of the facility, the facility structures that remain after closure, and monitoring systems for their intended use as required by the approved permit;

(v) a description of the planned use of the property; and

(vi) any other activity required by the Executive Secretary to protect human health and the environment for a period of 30 years or a period established by the Executive Secretary.

(b) Each owner or operator shall develop, keep on file, and abide by a post-closure plan as required by Subsection R315-302-2(2)(l) and as approved by the Executive Secretary as part of the permit. The post-closure plan shall address facility or unit maintenance and monitoring activities until the site becomes stabilized (i.e., little or no settlement, gas production or leachate generation) and monitoring and maintenance activities can be safely discontinued.

(c) The post-closure plan shall project time intervals at which post-closure activities are to be implemented and identify post-closure cost estimates and projected fund withdrawal intervals from the selected financial assurance instrument, where applicable, for the associated post-closure costs.

(d) The post-closure plan may be amended if conditions and circumstances justify such amendment. If it is determined that amendment of a facility or unit post-closure plan is required, the Executive Secretary may direct facility post-closure activities, in part or whole, to cease until the post-closure plan amendment has been reviewed and approved.

(7) Post-Closure Procedures.

(a) Each owner or operator shall commence post-closure activities after closure activities have been completed. The Executive Secretary may direct that post-closure activities cease until the owner or operator receives a notice from the Executive Secretary to proceed with post-closure activities.

(b) When post-closure activities are complete, as determined by the Executive Secretary, the owner or operator shall submit a certification to the Executive Secretary, signed by the owner or operator, and, except for Class II, IV, and VI Landfills, a professional engineer registered in the state of Utah stating why post-closure activities are no longer necessary (i.e., little or no settlement, gas production, or leachate generation).

(c) If the Executive Secretary finds that post-closure monitoring has established that the facility or unit is stabilized (i.e., little or no settlement, gas production, or

leachate generation), the Executive Secretary may authorize the owner or operator to discontinue any portion or all of the post-closure maintenance and monitoring activities.

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R315. Environmental Quality, Solid and Hazardous Waste.

R315-303. Landfilling Standards.

R315-303-1. Applicability.

These standards apply to:

- (1) Class I, II, and V Landfills;
- (2) Class III Landfills as specified in Rule R315-304; and
- (3) Class IV, and VI Landfills as specified in Rule R315-305.

R315-303-2. Standards for Performance.

(1) Ground Water. An owner or operator of a disposal facility shall not contaminate the ground water underlying the facility beyond the ground water quality standard set in Section R315-308-4 or, for constituents not set in Section R315-308-4, as established by the Executive Secretary based on health risk standards.

(2) Air Quality and Explosive Gas Emissions.

(a) An owner or operator of a disposal facility shall not allow concentrations of explosive gases generated by the facility to exceed:

(i) twenty-five percent of the lower explosive limit for explosive gases in facility structures, excluding gas control or recovery system components; and

(ii) the lower explosive limit for explosive gases at the property boundary or beyond.

(b) An owner or operator of a disposal facility shall not cause a violation of any ambient air quality standard at the property boundary or emission standard from any emission of landfill gases, combustion or any other emission associated with the facility.

(3) Surface Waters. An owner or operator of a disposal facility:

(a) shall not cause a violation of any Utah Pollution Discharge Elimination System permit or standard from discharges of surface run-off, leachate or any liquid associated with the facility; and

(b) shall be in compliance under the Clean Water Act for any discharge as well as in compliance with any area-wide or state-wide plan under Section 208 or 319 of the Clean Water Act.

R315-303-3. Standards for Design.

(1) Minimizing Liquids. An owner or operator of a landfill shall minimize liquids admitted to active areas by:

(a) covering according to Subsection R315-303-4(4);

(b) prohibiting the disposal of containerized liquids larger than household size, noncontainerized liquids, sludge containing free liquids, or any waste containing free liquids in containers larger than household size;

(c) designing the landfill to prevent run-on of all surface waters resulting from a maximum flow of a 25-year storm into the active area of the landfill; and

(d) designing the landfill to collect and treat the run-off of surface waters and other liquids resulting from a

25-year storm from the active area of the landfill.

(e) If the owner or operator of a landfill has received a storm water permit as issued by the Utah Division of Water Quality and is meeting the requirements of the permit, the landfill may be exempt, upon approval of the Executive Secretary, from the run-on and run-off control requirements of Subsections R315-303-3(1)(c) and (d).

(2) Leachate Collection Systems.

(a) An owner or operator of a landfill required to install liners shall:

(i) install a leachate collection system sized according to water balance calculations or using other accepted engineering methods either of which shall be approved by the Executive Secretary;

(ii) install a leachate collection system so as to prevent no more than one foot depth of leachate developing at any point in the bottom of the landfill unit; and

(iii) install a leachate treatment system or a pretreatment system, if necessary, in the case of discharge to a municipal water treatment plant.

(b) The returning of leachate to the landfill or the recirculation of leachate in the landfill may be done only in landfills that have a composite liner system or an approved equivalent liner system.

(3) Liner Designs. An owner or operator of a landfill shall use liners of one of the following designs:

(a) Standard Design. The design shall have a composite liner system consisting of two liners and the associated liner protection layers and a drainage system for leachate collection:

(i) an upper liner made of synthetic material with a thickness of at least 60 mils; and

(ii) a lower liner of at least two feet thickness of recompacted clay or other soil material with a permeability of no more than 1×10^{-7} cm/sec having the bottom liner sloped no less than 2% and the side liners sloped no more than 33%, except where construction and operational integrity can be demonstrated at steeper slopes, with the synthetic liner installed in direct and uniform contact with the compacted soil component; or

(b) Alternative Design.

(i) The Executive Secretary may approve an alternative liner design, on a site specific basis, if it can be documented that, under the conditions of location and hydrogeology, the performance standard of Subsection R315-303-2(1) can be met.

(ii) When approving an alternative liner design, the Executive Secretary shall consider the following factors:

(A) the hydrogeologic characteristics of the facility and surrounding land;

(B) the climatic factors of the area; and

(C) the volume and physical and chemical characteristics of the leachate; or

(c) Equivalent Design.

(i) The owner or operator may use, as approved by the Executive Secretary, alternative design, operating practices, and location characteristics which will minimize

the migration of solid waste constituents or leachate into the ground or surface water which are at least as effective as the liners of Subsections R315-303-3(3)(a) or (b).

(ii) The owner or operator must demonstrate that the standard of Subsection R315-303-2(1) can be met. The demonstration must be approved by the Executive Secretary, and must be based upon:

(A) the hydrogeologic characteristics of the facility and the surrounding land;

(B) the climatic factors of the area;

(C) the volume and physical and chemical characteristics of the leachate;

(D) predictions of contaminate fate and transport in the subsurface that maximize contaminant migration and consider impacts on human health and the environment; or

(d) Stringent Design. When conditions of location, hydrogeology, or waste stream justify, the Executive Secretary may require that the liner of a landfill be constructed to meet standards more stringent than the liner designs of Subsection R315-303-3(3)(a).

(e) Small Landfill Design.

(i) The small landfill design applies only to a Class II Landfill.

(ii) Subject to the location standards of Section R315-302-1 and the performance standards of Section R315-303-2, a Class II Landfill may be exempt from the liner, leachate collection system, and ground water monitoring requirements of Rule R315-303.

(iii) A Class II Landfill will be approved only if:

(A) there is no evidence of existing ground water contamination; and

(B) the landfill serves a community that has no practicable waste management alternative as determined by the Executive Secretary; and

(C) the landfill is located in an area which receives less than 25 inches of annual precipitation.

(iv) A Class II Landfill may lose the exemptions of the small landfill design if at anytime the landfill receives more than 20 tons of solid waste per day, based on an annual average, or has caused ground water contamination.

(4) Closure. At closure, an owner or operator of a Class I, II, IIIa, IVa, and V Landfill shall use one of the following designs for the final cover.

(a) Standard Design. The standard design of the final cover shall consist of two layers:

(i) a layer to minimize infiltration, consisting of at least 18 inches of compacted soil, or equivalent, with a permeability of 1×10^{-5} cm/sec or less, or equivalent, shall be placed upon the final lifts;

(A) in no case shall the cover of the final lifts be more permeable than the bottom liner system or natural subsoils present in the unit; and

(B) the grade of surface slopes shall not be less than 2%, nor the grade of side slopes more than 33%, except where construction integrity and the integrity of erosion control can be demonstrated at steeper slopes; and

(ii) a layer to minimize erosion, consisting of:

(A) at least 6 inches of soil capable of sustaining vegetative growth placed over the compacted soil cover and seeded with grass, other shallow rooted vegetation or other native vegetation; or

(B) other suitable material, approved by the Executive Secretary.

(b) Alternative Design. The Executive Secretary may approve an alternative final cover design, on a site specific basis, if it can be documented that:

(i) the alternative final cover achieves an equivalent reduction in infiltration as specified as the standard design in Subsection R315-303-3(4)(a)(i); and

(ii) the alternative final cover provides equivalent protection from wind and water erosion as specified as the standard design in Subsection R315-303-3(4)(b)(ii).

(c) If a landfill has been constructed using an approved alternative landfill design, including a waiver, or exemption, from the liner or ground water monitoring requirements, the Executive Secretary may require, on a site specific basis, the landfill closure to be a more stringent design than the standard design specified in Subsection R315-303-3(4)(a) to protect human health or the environment.

(d) In no case shall any modification be made to the final cover, as placed and approved at closure by the Executive Secretary, unless that modification:

(i) is a necessary repair of the approved final cover;

(ii) maintains or improves the effectiveness of the final cover; and

(iii) is approved by the Executive Secretary.

(5) Gas Control.

(a) An owner or operator shall design each landfill so that explosive gases are monitored quarterly.

(b) If the concentration of these gases ever exceed the standard set in Subsection R315-303-2(2)(a), the owner or operator must:

(i) immediately take all necessary steps to ensure protection of human health and, within 24 hours or the next business day, notify the Executive Secretary;

(ii) within seven days of detection, place in the operating record the explosive gas levels detected and a description of the steps taken to protect human health; and

(iii) within 60 days of detection, implement a remediation plan, that has been approved by the Executive Secretary, for the explosive gas release, place a copy of the plan in the operating record, and notify the Executive Secretary that the plan has been implemented.

(c) Collection and handling of explosive gases shall not be required if it can be shown that the explosive gases will not support combustion.

(d) The Executive Secretary may, on a site specific basis, waive the requirement of monitoring explosive gases at a Class II Landfill. The waiver may be granted after:

(i) considering the characteristics of the landfill and the waste stream accepted;

(ii) taking into account climatic and hydrogeologic

conditions of the site; and

(iii) completing a public comment period as specified by Section R315-311-3.

(iv) The Executive Secretary may revoke any waiver from the requirement of monitoring explosive gases if the lack of monitoring explosive gases at the landfill presents a threat to human health or the environment.

(v) The requirement to monitor explosive gases inside buildings at a landfill may not be waived.

(e) A landfill that accepts no municipal waste is exempt from the gas monitoring requirement of Subsection R315-303-3(5)(a).

(6) Design Drawings.

(a) Design drawings and as built drawings of any engineered structure, including landfill liners, leachate collection systems, run-on/run-off control systems, final covers, ground water monitoring systems, and gas collection systems, shall be signed and sealed by a professional engineer registered in the State of Utah.

(b) As built drawings shall be submitted to the Executive Secretary on or before 90 days following the completion of the engineered structure at the landfill.

(7) Other Requirements. An owner or operator shall design each landfill to provide for:

(a) fencing at the property or unit boundary or the use of other artificial or natural barriers to impede entry by the public and large animals. A lockable gate shall be required at the entry to the landfill;

(b) monitoring ground water according to Rule R315-308 using a design approved by the Executive Secretary. The Executive Secretary may also require monitoring of:

(i) surface waters, including run-off;

(ii) leachate; and

(iii) subsurface landfill gas movement and ambient air;

(c) weighing or estimating the tonnage of all incoming waste and recording the tonnage in the facility's operation record;

(d) erecting a sign at the facility entrance that identifies at least the name of the facility, the hours during which the facility is open for public use, unacceptable materials, and an emergency telephone number. Other pertinent information may also be included;

(e) adequate fire protection to control any fires that may occur at the facility. This may be accomplished by on-site equipment or by arrangement made with the nearest fire department;

(f) preventing potential harborage in buildings, facilities, and active areas of rat and other vectors, such as insects, birds, and burrowing animals;

(g) minimizing the size of the unloading area and working face as much as possible, consistent with good traffic patterns and safe operation;

(h) approach and exit roads of all-weather construction, with traffic separation and traffic control on-site and at the site entrance; and

(i) communication, such as telephone or radio, between employees working at the landfill and management offices on-site and off-site to handle emergencies.

R315-303-4. Standards for Maintenance and Operation.

(1) Plan of Operation. An owner or operator of a landfill shall maintain and operate the facility to conform to the approved plan of operation.

(2) Operating Details. An owner or operator of a landfill shall operate the facility to:

(a) control fugitive dust generated from roads, construction, general operations, and covering the waste;

(b) allow no open burning;

(c) collect scattered litter as necessary to avoid a fire hazard or an aesthetic nuisance;

(d) prohibit scavenging;

(e) conduct on-site reclamation in an orderly sanitary manner and in a way that does not interfere with the disposal site operation;

(f) ensure that landfill personnel, trained in landfill operations, are on-site when the site is open to the public;

(i) at least one person on-site for landfills that receive, on an average annual basis, less than 15,000 tons per year; and

(ii) at least two persons on-site, with one person at the active face, for each landfill that receives, on an average annual basis, more than 15,000 tons per year.

(g) control insects, rodents, and other vectors; and

(h) ensure that reserve operational equipment will be available to maintain and meet these standards.

(3) Boundary Posts. An owner or operator of a landfill shall clearly mark the active area boundaries authorized in the permit with permanent posts or using an equivalent method clearly visible for inspection purposes.

(4) Daily and Intermediate Cover.

(a) An owner or operator of a landfill shall, at the close of each day of operation, completely cover the waste with at least six inches of soil or other suitable material approved by the Executive Secretary. The use of an approved alternative daily cover:

(i) may not present a threat to human health or the environment; and

(ii) may be used only on a schedule as established by the Executive Secretary.

(iii) The schedule for use of the approved alternative cover shall be established based on the alternative cover's performance in controlling vectors, fires, odors, blowing litter, and scavenging.

(b) The Executive Secretary may, on a site specific basis, waive the requirement for daily cover of the waste at a landfill that accepts no municipal waste if the owner or operator demonstrates that an alternative schedule for covering the waste does not present a threat to human health or the environment. The demonstration from the owner or operator of the landfill must include at least the following:

(i) certification that the landfill accepts no municipal waste;

(ii) a detailed list of the waste types accepted by the landfill;

(iii) the alternative schedule on which the waste will be covered; and

(iv) any other operational practices that may reduce the threat to human health or the environment if an alternative schedule for covering the waste is followed.

(v) In granting any waiver from the daily cover requirement, the Executive Secretary may place conditions on the owner or operator of the landfill as to the frequency of covering, depth of the cover, or type of material used as cover that will minimize the threat to human health or the environment.

(vi) The Executive Secretary may revoke any waiver from the daily cover requirement if any condition is not met or if the alternative schedule for covering the waste presents a threat to human health or the environment.

(c) If an area of the working face of a landfill that accepts municipal waste will not receive waste for a period longer than 30 days, the owner or operator shall cover the area with a minimum of 12 inches of soil as an intermediate cover or an alternative intermediate cover as approved by the Executive Secretary.

(i) No alternative intermediate cover will be approved by the Executive Secretary without application from the owner or operator.

(ii) Approval for an alternative intermediate cover may be granted after:

(A) considering the design of the landfill, waste stream accepted, and waste handling practices; and

(B) taking into account climatic, hydrogeologic, and soil conditions of the site.

(iii) In granting approval for an alternative intermediate cover, the Executive Secretary may place conditions on the owner or operator of the landfill as to the depth or type of material used and maintenance of the integrity of the cover that will minimize the threat to human health or the environment.

(iv) The Executive Secretary may revoke the approval of an alternative intermediate cover if any condition is not met or if the alternative intermediate cover is determined to present a threat to human health or the environment.

(5) Monitoring Systems. An owner or operator of a landfill shall maintain the monitoring systems required in Subsection R315-303-3(7)(b).

(6) Recycling Required.

(a) An owner or operator of a landfill at which the general public delivers household solid waste shall provide containers in which the general public may place recyclable materials for which a market exists that are brought to the site:

(i) during the normal hours of operation; and

(ii) at a location convenient to the public, i.e., near the entrance gate.

(b) An owner or operator may demonstrate alternative means to providing an opportunity for the general

public to recycle household solid waste.

(7) Disposal of Hazardous Waste and Waste Containing PCBs.

(a) An owner or operator of a solid waste disposal facility shall not knowingly dispose, treat, store, or otherwise handle hazardous waste or waste containing PCBs except under the following conditions:

(i) hazardous waste:

(A) the waste meets the conditions specified in Subsections R315-2-4; or

(B) the waste meets the conditions specified in 40 CFR 261.5 (1996) as incorporated by reference in Section R315-2-5; or

(ii) waste containing PCB's:

(A) the facility meets the requirements specified in Subsection R315-315-7(3)(a); or

(B) the waste meets the requirements specified in Subsections R315-315-7(2) or (3)(b).

(b) An owner or operator of a solid waste disposal facility shall include and implement, as part of the plan of operation, a plan that will inspect loads or take other steps, as approved by the Executive Secretary, that will prevent the disposal of prohibited hazardous waste and prohibited waste containing PCBs, including:

(i) inspection frequency and inspection of loads suspected of containing prohibited hazardous waste or prohibited waste containing PCBs;

(ii) inspection in a designated area or at a designated point in the disposal process;

(iii) a training program for the facility employees in identification of prohibited hazardous waste and prohibited waste containing PCBs; and

(iv) maintaining written records of all inspections, signed by the inspector.

(c) If the receipt of prohibited hazardous waste or prohibited waste containing PCBs is discovered, the owner or operator of the facility shall:

(i) notify the Executive Secretary, the hauler, and the generator within 24 hours;

(ii) restrict the inspection area from public access and from facility personnel; and

(iii) assure proper cleanup, transport, and disposal of the waste.

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40 CFR 258

R315. Environmental Quality, Solid and Hazardous Waste.
R315-304. Industrial Solid Waste Facility Requirements.
R315-304-1. Applicability.

(1) Except for a Class IIIb Landfill that receives waste exclusively from on-site, the requirements of Rule R315-304 apply to each Class III Landfill as specified.

(2) For a Class IIIb Landfill that receives waste exclusively from on site:

(a) the requirements of Rule R315-304 become effective July 15, 1999.

(b) The owner or operator of a landfill may:

(i) apply to the Executive Secretary for an extension of time beyond July 15, 1999 to meet the requirements of Rule R315-304; and

(ii) be placed on a compliance schedule by the Executive Secretary.

(3) The requirements of Rule R315-304 do not apply to the following materials managed at an industrial facility:

(a) fly ash waste, bottom ash waste, slag waste, or flue gas emission control dust generated primarily from the combustion of coal or other fossil fuels;

(b) waste from the extraction, beneficiation, and processing of ores and minerals;

(c) electric arc furnace slag, open hearth furnace slag, and other slags generated during carbon steel production; and

(d) cement kiln dust.

R315-304-2. Industrial Landfill Standards for Performance.

Each Class III Landfill shall meet the landfill standards for performance as specified in Section R315-303-2.

R315-304-3. Definitions.

Terms used in Rule R315-304 are defined in Section R315-301-2. In addition, for the purpose of Rule R315-304, the following definitions apply.

(1) "Class IIIa Landfill" means an industrial solid waste landfill that is not open to the general public and may accept:

(a) any nonhazardous industrial waste;

(b) waste that is exempt from hazardous waste regulations under Section R315-2-4; or

(c) conditionally exempt small quantity generator hazardous waste as defined by Section R315-2-5.

(2) "Class IIIb Landfill" means an industrial solid waste landfill that is not open to the general public and may accept any nonhazardous industrial solid waste except:

(a) waste that is exempt from hazardous waste regulations under Section R315-2-4, excluding Subsections R315-2-4(b)(3), (4), (5), (7), and (14), unless approved by the Executive Secretary; or

(b) conditionally exempt small quantity generator hazardous waste as defined by Section R315-2-5.

(3) "Existing Class III Landfill" means:

(a) for a Class IIIa Landfill and a Class IIIb Landfill that does not receive waste exclusively from on-site, an industrial solid waste landfill that began receiving waste on or before January 1, 1998; and

(b) for a Class IIIb Landfill that receives waste exclusively from on-site, an industrial solid waste landfill that began receiving waste on or before July 15, 1999.

(4) "New Class III Landfill" means:

(a) for a Class IIIa Landfill and a Class IIIb Landfill that does not receive waste exclusively from on-site, an industrial solid waste landfill that began receiving waste after January 1, 1998; and

(b) for a Class IIIb Landfill that receives waste exclusively from on-site, an industrial solid waste landfill that began receiving waste after July 15, 1999.

R315-304-4. Industrial Landfill Location Standards.

(1) Class IIIa Landfills.

(a) A new Class IIIa Landfill shall meet the location standards of Subsection R315-302-1(2).

(b) A new Class IIIa Landfill that is proposed on the site of generation of the industrial solid waste or a lateral expansion of an existing Class IIIa Landfill, shall meet the location standards of Subsections R315-302-1(2)(b), (c), (d), and (e) with respect to geology, surface water, wetlands, and ground water.

(c) An existing Class IIIa Landfill shall not be subject to the location standards of Subsection R315-302-1(2).

(d) An exemption from any location standard of Subsection R315-302-1(2), except the standards for floodplains and wetlands, may be granted by the Executive Secretary on a site specific basis if it is determined that the exemption will cause no adverse impacts to human health or the environment.

(i) No exemption may be granted without application to the Executive Secretary.

(ii) If an exemption is granted, the landfill may be required to have more stringent design, construction, monitoring program, or operational practice to protect human health or the environment.

(2) Class IIIb Landfills.

(a) A new Class IIIb Landfill or a lateral expansion of an existing Class IIIb Landfill shall be subject to the following location standards:

(i) the standards with respect to floodplains as specified in Subsection R315-302-1(2)(c)(ii);

(ii) the standards with respect to wetlands as specified in Subsection R315-302-1(2)(d); and

(iii) the landfill shall be located so that the lowest level of waste is at least five feet above the historical high level of ground water.

(b) For a lateral expansion of an existing Class IIIb Landfill, an exemption from any location standard of Subsection R315-304-4(2)(a) may be granted by the Executive Secretary on a site specific basis if it is determined that the exemption will cause no adverse impacts to human health or the environment.

(i) No exemption may be granted without application to the Executive Secretary.

(ii) If an exemption is granted, the landfill may be required to have more stringent design, construction, monitoring program, or operational practice to protect human health or the environment.

(c) An existing Class IIIb Landfill shall not be subject to the location standards of Subsection R315-304-4(2)(a).

R315-304-5. Industrial Landfill Requirements.

(1) Each Class III Landfill shall meet the following applicable requirements, as determined by the Executive

Secretary:

(a) the plan of operation requirements of Subsections R315-302-2(2)(a), (b), (c), (d), (g), (i), (j), (k), (l), (m), (n), and (o);

(b) the recordkeeping requirements of Subsection R315-302-2(3)(a), (b)(i), (iii), (iv), and (vi);

(c) the reporting requirements of Subsection R315-302-2(4); and

(d) the inspection requirements of Subsection R314-302-2(5).

(2) Each Class III Landfill shall meet the applicable general requirements for closure and post-closure care of Subsections R315-302-2(6); R315-302-3(2), (3), (4)(a), and (b); (5); (6)(a)(iv) through (vi), (6)(b), and (c); and (7)(a) as determined by the Executive Secretary.

(a) Each Class IIIa Landfill shall meet the specific closure requirements of Subsection R315-303-3(4).

(b) Each Class IIIb Landfill shall meet the specific closure requirements of Subsection R315-305-5(5)(b).

(c) If a Class III Landfill is already subject to the closure and post-closure care requirements of another Federal or state agency which are as stringent as specified in Subsections R315-304-5(2)(a) or (b), the landfill may be exempt, upon approval of the Executive Secretary, from the closure requirements of Subsections R315-304-5(2)(a) or (b).

(3) Standards for Design.

(a) The owner or operator of a Class III Landfill shall design the landfill to minimize the acceptance of liquids and control storm water run-on/run-off as specified in Subsection R315-303-3(1)(b), (c), and (d).

(b) The owner or operator of a Class III Landfill shall design the landfill to meet the requirements of Subsections R315-303-3(7)(a), (c), (e), (f), (g), (h), and (i) as determined by the Executive Secretary.

(4) Ground Water Monitoring.

(a) The owner or operator of a Class IIIa Landfill shall monitor the ground water beneath the landfill as specified in Rule R315-308.

(b) Subject to the performance standard of Subsection R315-303-2(1), if the owner or operator of a Class IIIa Landfill is monitoring the ground water beneath the landfill and otherwise meeting the requirements of a discharge permit as issued by the Utah Division of Water Quality, the landfill may be exempt, upon approval of the Executive Secretary, from the ground water monitoring requirements of Rule R315-308.

(c) A Class IIIb Landfill is exempt from the ground water monitoring requirements of Rule R315-308.

(5) Standards for Operation.

(a) Each Class IIIa Landfill shall meet the standards of Section R315-303-4 except:

(i) for the requirements of Subsections R315-303-4(2)(f) and R315-303-4(6); and

(ii) may be exempt from the daily cover requirements of Subsection R315-303-4(4) upon the demonstration that an alternate schedule for the covering of waste at the landfill will not present a threat to human health or the environment.

(b) Each Class IIIb Landfill shall meet the requirements for operation in Subsections R315-305-4(7) and R315-305-5(2) through (4) as determined by the Executive Secretary.

(6) Financial Assurance.

(a) The owner or operator of each Class III Landfill shall establish financial assurance as required by Rule R315-309.

(b) If the owner or operator of a Class III Landfill has financial assurance, in effect and active, that covers the costs of closure and post-closure care of the landfill as required by another Federal or state agency which is as stringent as the requirements of Rule R315-309, the landfill may be exempt, upon approval of the Executive Secretary, from the financial assurance requirements of Rule R315-309.

(7) Permit Requirements.

(a) Each Class III Landfill shall apply for and obtain a permit to operate by meeting the requirements of Rule R315-310.

(b) The contents of a permit application for a Class IIIa Landfill shall be the information required in Section R315-310-4.

(c) The contents of a permit application for a Class IIIb Landfill shall be the information required in Section R315-310-5.

**KEY: solid waste management, waste disposal
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R315. Environmental Quality, Solid and Hazardous Waste.

R315-305. Class IV and VI Landfill Requirements.

R315-305-1. Applicability.

(1) These standards apply to each facility that landfills only:

(a) construction/demolition waste, inert waste, yard waste, dead animals;

(b) upon meeting the requirements of Section 19-6-804 and Subsections R315-320-3(1) or (2), waste tires and material derived from waste tires; or

(c) upon meeting the requirements of R315-315-8(3), petroleum contaminated soils.

(2) Inert waste used as road building material and fill material are excluded from the requirements of Rule R315-305.

R315-305-2. Class IV and VI Landfill Standards for Performance.

Each Class IV and VI Landfill shall meet the landfill standards for performance as specified in Section R315-303-2.

R315-305-3. Definitions.

Terms used in Rule R315-305 are defined in Section R315-301-2. In addition, for the purpose of Rule R315-305, the following definitions apply.

(1) "Class IVa Landfill" means a Class IV Landfill that receives, based on an annual average, over 20 tons of waste per day and may receive, as a component of construction/demolition waste, waste from a conditionally exempt small quantity generator of hazardous waste, as defined by Section R315-2-5.

(2) "Class IVb Landfill" means a Class IV Landfill that receives, based on an annual average, 20 tons, or less, of waste per day or demonstrates that no waste from a conditionally exempt small quantity generator of hazardous waste is accepted.

R315-305-4. General Requirements.

(1) Location Standards.

(a) A new Class IVa Landfill shall meet the location standards of Subsection R315-302-1(2).

(b) A new Class IVb or VI Landfill or the expansion of an existing Class IVb or VI Landfill shall be subject to the following location standards:

(i) the standards with respect to floodplains as specified in Subsection R315-302-1(2)(c)(ii);

(ii) the standards with respect to wetlands as specified in Subsection R315-302-1(2)(d);

(iii) the standards with respect to ground water as specified in Subsection R315-302-1(2)(e)(i)(B); and

(iv) if the permit application for a new Class IVa, IVb, or VI Landfill requests approval to accept dead animals for disposal, the application shall document that the landfill also meets the requirements of Subsections R315-302-1(2)(a)(i), (ii), (iv), and (v).

(v) Exemptions from the location standards of Subsection R315-305-4(1)(b)(i), (ii), and (iii) may be granted by the Executive Secretary for a new Class IVb or VI Landfill, on a site specific bases, if it is determined that the exemption will cause no adverse impact to human health or the environment.

(A) No exemption may be granted without application to the Executive Secretary.

(B) If an exemption is granted, the landfill may be required to have more stringent design, construction, monitoring program, or operational practice to protect human health or the environment.

(c) An existing Class IVa, IVb, or VI Landfill:

(i) shall not be subject to the location standards of Subsections R315-305-4(1)(a) or R315-305-4(1)(b)(i), (ii), or (iii); but

(ii) if the current permit of an existing Class IVa, IVb, or VI Landfill does not allow the acceptance of dead animals and the owner or operator requests approval to accept dead animals for disposal after October 15, 2003, the request to the Executive Secretary shall document that the landfill also meets the requirements of Subsections R315-302-1(2)(a)(i), (ii), (iv), and (v).

(2) An owner or operator of a Class IV or VI Landfill shall obtain a permit, as set forth in Rule R315-310.

(3) An owner or operator of a Class IV or VI Landfill shall design and operate the landfill to:

(a) prevent the run-on of all surface waters resulting from a maximum flow of a 25-year storm into the active area of the landfill; and

(b) collect and treat, if necessary, the run-off of surface waters and other liquids resulting from a 25-year storm from the active area of the landfill.

(4) An owner or operator of a Class IVa Landfill shall monitor the ground water beneath the landfill as specified in Rule R315-308.

(5) An owner or operator of a Class IV or VI Landfill shall erect a sign at the facility entrance as specified in Subsection R315-303-3(6)(d).

(6) An owner or operator of a Class IV or VI Landfill shall maintain the applicable records as specified in Subsection R315-302-2(3).

(7) An owner or operator of a Class IV or VI Landfill shall meet the requirements of Subsection R315-302-2(6) and make the required recording with the county recorder.

R315-305-5. Requirements for Operation.

(1) The owner or operator of a Class IV or VI Landfill shall not accept any other form of waste except the wastes specified in Subsection R315-305-1(1).

(2) The owner or operator of a Class IV or VI Landfill shall prevent the disposal of unauthorized waste by ensuring that at least one person is on site during hours of operation and shall prevent unauthorized disposal during off-hours by controlling entry, i.e., lockable gate or barrier, when the facility is not open.

(3) The owner or operator of a Class IV or VI Landfill shall:

(a) minimize the size of the working face as required by Subsection R315-303-3(7)(g);

(b) employ measures to prevent emission of fugitive dusts, when weather conditions or climate indicate that transport of dust off-site is liable to create a nuisance;

(c) meet the requirements of Subsection R315-303-3(1)(a) and (b) to minimize liquids admitted to the landfill.

(d) collect scattered litter as necessary to avoid a fire hazard or an aesthetic nuisance; and

(e) prohibit scavenging.

(4) The owner or operator of a Class IV or VI Landfill shall cover timbers, wood, and other combustible waste with a minimum of six inches of soil, or equivalent, as needed to avoid a fire hazard.

(5) The owner or operator of a Class IV or VI Landfill shall meet the applicable general requirements of closure and post-closure care of Section R315-302-3 as determined by the Executive Secretary.

(a) The owner or operator of a Class IVa Landfill shall meet the specific closure requirements of Subsection R315-303-3(4).

(b) The owner or operator of a Class IVb or VI Landfill shall close the facility by:

(i) leveling the waste to the extent practicable;

(ii) covering the waste with a minimum of two feet of soil, including six inches of topsoil;

(iii) contouring the cover as specified in Subsection R315-303-3(4)(a)(i)(B); and

(iv) seeding the cover with grass, other shallow rooted vegetation, or other native vegetation or covering in another manner approved by the Executive Secretary to minimize erosion.

(v) The Executive Secretary may approve an alternative final cover design for a Class IVb or VI Landfill if it is documented that the alternative final cover provides equivalent protection from infiltration and erosion as the cover specified in Subsection R315-305-5(5)(b).

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19-6-109

40 CFR 257

R315. Environmental Quality, Solid and Hazardous Waste.

R315-306. Incinerator Standards.

R315-306-1. Applicability.

(1) These standards apply to any incinerator facility as specified in Subsections R315-306-2(1) and R315-306-3(1).

(2) These standards do not apply to:

- (a) an incineration facility which is required to obtain a state or federal hazardous waste plan approval;
- (b) a facility burning only untreated woodwaste;
- (c) the flaring of gases recovered at a landfill; or
- (d) a facility that incinerates or cremates exclusively human or animal remains.

R315-306-2. Requirements for Large Incinerators.

(1) These standards apply to any incinerator facility designed to incinerate more than ten tons of solid waste per day.

(2) An incinerator facility shall be subject to the location standards of Section R315-302-1 with the exception of the following Subsections: R315-302-1(2)(a)(iv) and (v), R315-302-1(2)(e), and R315-302-1(3).

(3) Each owner or operator of an incinerator facility shall comply with Section R315-302-2. The submitted plan of operation shall also address alternative storage, or disposal plans for all breakdowns that would result in overfilling the storage facility.

(4) The submitted plan of operation shall also contain a written waste identification plan which shall include identification of the specific waste streams to be handled by the facility, generator waste analysis requirements and procedures, waste verification procedures at the facility, generator certification of wastes shipped as being non-hazardous, and record keeping procedures, including a detailed operating record.

(5) Each incinerator facility shall be surrounded by a fence, trees, shrubbery, or natural features so as to control access and be screened from the view of immediately adjacent neighbors, unless the tipping floor is fully enclosed by a building. Each site shall also have an adequate buffer zone of at least 50 feet from the operating area to the nearest property line in areas zoned residential to minimize noise and dust nuisances.

(6) Solid waste shall be stored temporarily in storage compartments, containers or areas specifically designed to store wastes. Storage of wastes other than in specifically designed compartments, containers or areas is prohibited. Equipment and space shall be provided in the storage and charging areas, and elsewhere as needed, to allow periodic cleaning as may be required to maintain the plant in a sanitary and clean condition.

(7) A composite sample of the ash and residues from each incinerator facility shall be taken according to a sampling plan approved by the Executive Secretary.

(a) The sample shall be analyzed by the U.S. EPA Test Method 1311 as provided in 40 CFR Part 261,

Appendix II, 2000 ed., Toxic Characteristics Leaching Procedure (TCLP) to determine if it is hazardous.

(b) If the ash and residues are found to be nonhazardous, they shall be disposed at a permitted landfill or recycled.

(c) If the ash and residues are found to be hazardous, they shall be disposed in a permitted hazardous waste disposal site.

(8) Each incinerator must be located, designed, constructed and operated in a manner to comply with appropriate state and local air pollution control authority emission and operating requirements.

(9) An incinerator must collect and treat all run-off from the active areas of the site that may result from a 25-year storm event, and divert all run-on for the maximum flow of a 25-year storm around the site.

(10) All-weather roads shall be provided from the public highways or roads, to and within the disposal site and shall be designed and maintained to prevent traffic congestion hazards, dust, and noise pollution.

(11) Access to the incinerator site shall be controlled by means of a complete perimeter fence or other features and gates which shall be locked when an attendant is not at the gate to prevent unauthorized entry of persons or livestock to the facility.

(12) The plan of operation shall include a training program for new employees and annual review training for all employees to ensure safe handling of waste and proper operation of the equipment.

(13) Each owner or operator shall post signs at the facility which indicate the name, hours of operation, necessary safety precautions, types of wastes that are prohibited, and any other pertinent information.

(14) Each owner or operator of an incinerator facility shall be required to provide recycling facilities in a manner equivalent to those specified for landfills in Subsection R315-303-4(6).

(15) Each owner or operator of an incinerator facility shall implement a plan that will inspect loads or take other steps, as approved by the Executive Secretary, to prevent the disposal of prohibited hazardous waste or prohibited waste containing PCB's in a manner equivalent to those specified for landfills in Subsection R315-303-4(7).

(16) Each owner or operator shall close its incinerator by removing all ash, solid waste, and other residues to a permitted facility.

(17) Each owner or operator of an incinerator facility shall provide financial assurance to cover the costs for closure of the facility that meets the requirements of Rule R315-309.

R315-306-3. Requirements for Small Incinerators.

(1) Applicability.

(a) These requirements apply to any incinerator designed to incinerate ten tons, or less, of solid waste per day and incinerator facilities that incinerate solid waste only from on-site sources.

(b) If an incinerator processes 250 pounds, or less, of solid waste per week, the requirements of Section R315-306-3 do not apply and a permit from the Executive Secretary is not required but the facility may be regulated by other local, state, or federal requirements.

(2) Requirements.

(a) Each owner and operator of an incinerator facility shall submit a plan of operation to the Executive Secretary that meets the requirements of Section R315-302-2.

(b) The submitted plan of operation shall also address:

(i) alternative storage, or disposal plans for all breakdowns that would result in overfilling the storage areas;

(ii) identification of the specific waste streams to be handled by the facility;

(iii) generator waste analysis requirements and procedures;

(iv) waste verification procedures at the facility;

(v) generator certification of wastes shipped as being nonhazardous;

and

(vi) recordkeeping procedures, including a detailed operating record.

(c) Solid waste shall be stored temporarily only in storage compartments, containers, or areas specifically designed to store wastes.

(i) Storage of wastes other than in specifically designed compartments, containers or areas is prohibited.

(ii) Equipment and space shall be provided in the storage and charging areas, and elsewhere as needed, to allow periodic cleaning as necessary to maintain the plant in a sanitary and clean condition.

(d) Incinerator ash and residues from any incinerator shall be sampled, analyzed, and disposed as specified in Subsection R315-306-2(7).

(e) The owner or operator of the incinerator shall prevent the disposal of prohibited hazardous waste or prohibited waste containing PCB's as specified in Subsection R315-306-2(15).

(f) The incinerator must be designed, constructed and operated in a manner to comply with appropriate state and local air pollution control authority emission and operating requirements.

(g) The plan of operation shall include a training program for new employees and annual review training for all applicable employees to ensure safe handling of waste and proper operation of the equipment.

(h) The owner or operator of the incinerator shall close the facility by removing all solid waste, ash, and other residues to a permitted solid waste disposal facility.

(i) The owner or operator of the incinerator facility shall provide financial assurance to cover the costs for closure of the facility that meets the requirements of Rule R315-309.

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**R315. Environmental Quality, Solid and Hazardous Waste.
R315-307. Landtreatment Disposal Standards.**

R315-307-1. Applicability.

(1) These standards apply to any facility that engages in landtreatment, landfarming, or landspreading disposal of solid waste.

(2) These standards do not apply to:

(a) a facility that uses sewage sludge, woodwaste or other primarily organic sludge in recycling operations as specified in Section R315-312-4;

(b) agricultural solid wastes resulting from the operation of a farm, including farm animal manure and agricultural residues;

(c) inert waste or demolition waste; or

(d) industrial solid waste facilities.

(3) The landtreatment of domestic sewage sludge and septage is exempt from the requirements of Rule R315-307 but is regulated under the applicable requirements of Rule R317-8 and 40 CFR 503 by the Utah Division of Water Quality.

(4) The owner or operator of a landtreatment disposal facility shall meet the standards for performance specified in Subsection R315-303-2.

(5) The owner or operator of a landtreatment disposal facility shall meet the location standards of Section R315-302-1.

R315-307-2. Standards for Design.

(1) The owner or operator of a landtreatment disposal facility shall design the facility to provide interim waste storage areas that meet the requirements for piles, as specified in Rule R315-314.

(2) The facility shall have systems to collect and treat all run-off from a 25 year storm, and divert all run-on for the maximum flow of a 25 year storm around the active area.

(3) The facility shall be designed to avoid standing water anywhere on the active area.

(4) The facility shall be designed to avoid slopes and other features that will lead to soil and waste erosion, unless contour plowing or other measures are taken to avoid erosion.

(5) The owner or operator shall monitor ground water according to Rule R315-308.

(6) The owner or operator shall control access to the facility by fencing or other means and erect a sign as specified in Subsection R315-303-3(6)(d).

R315-307-3. Standards for Maintenance and Operation.

The owner or operator of a landtreatment disposal facility shall maintain and operate the facility to:

(1) avoid the disposal of garbage or infectious waste;

(2) avoid applying wastes at rates greater than ten times agronomic rates using the proposed cover crop, or depths greater than would allow for disking the soil by tracked vehicles;

(3) provide disking of soils during the growing season and after each application of waste to maintain aerobic soil conditions, minimize odors and lessen run-off;

(4) avoid applying waste to any active area having standing water;

(5) conform to the approved plan of operation and all other applicable requirements of Section R315-302-2;

(6) provide for a written contract between landowners, waste generators, waste haulers, and waste operators requiring compliance with rules as a condition of the contract; and

(7) avoid food-chain crops during the active life of the facility and until demonstrated to be safe, after closure, according to the closure and post-closure plans filed with the plan of operation. Specific approval in writing from the Executive Secretary is required for any landspreading disposal facility that is used to raise food-chain crops after closure.

R315-307-4. Standards for Closure.

(1) The owner or operator of a landtreatment disposal facility shall:

(a) close in a manner to comply with Section R315-302-3; and

(b) meet the financial assurance requirements of Rule R315-309.

(3) Upon closure of a landtreatment disposal facility, the owner or operator shall record with the county recorder as part of the record of title the fact that the property has been used as a landtreatment disposal facility pursuant to Subsection R315-302-2(6).

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R315. Environmental Quality, Solid and Hazardous Waste.
R315-308. Ground Water Monitoring Requirements.

R315-308-1. Applicability.

(1) Each existing landfill, pile, or landtreatment disposal facility that is required to perform ground water monitoring shall comply with the ground water monitoring requirements according to the compliance schedule as established by the Executive Secretary during the permitting or permit renewal process.

(2) Each new landfill, pile, or landtreatment disposal facility that is required to perform ground water monitoring shall have the ground water monitoring system complete and operational before waste may be accepted at the facility.

(3) Ground water monitoring requirements may be waived by the Executive Secretary if the owner or operator of a solid waste disposal facility can demonstrate that there is no potential for migration of hazardous constituents from the facility to the ground water during the active life of the facility and the post-closure care period. This demonstration must be certified by a qualified ground-water scientist and approved by the Executive Secretary, and must be based upon:

(a) site-specific field collected measurements, sampling, and analysis of physical, chemical, and biological processes affecting contaminant fate and transport; and

(b) contaminant fate and transport predictions that maximize contaminant migration and consider impacts on human health and the environment.

(4) Once a ground water monitoring system and program has been established at a disposal facility, ground water monitoring shall continue to be conducted throughout the active life, closure, and post-closure care periods as specified by the Executive Secretary.

R315-308-2. Ground Water Monitoring Requirements.

(1) The ground water monitoring system must consist of at least one background or upgradient well and two downgradient wells, installed at appropriate locations and depths to yield ground water samples from the uppermost aquifer and all hydraulically connected aquifers below the facility, cell, or unit. The downgradient wells shall be designated as the point of compliance and must be installed at the closest practicable distance hydraulically down gradient from the unit boundary not to exceed 150 meters (500 feet) and must also be on the property of the owner or operator:

(a) the upgradient well must represent the quality of background water that has not been affected by leakage from the active area; and

(b) the downgradient wells must represent the quality of ground water passing the point of compliance. Additional wells may be required by the Executive Secretary in complicated hydrogeological settings or to define the extent of contamination detected.

(2) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole. This casing must allow collection of representative ground water samples. Wells must be constructed in such a manner as to prevent contamination of the samples, the sampled strata, and between aquifers and water bearing strata. All monitoring wells and all other devices and equipment used in the monitoring

program must be operated and maintained so that they perform to design specifications throughout the life of the monitoring program.

(3) The ground water monitoring program must include at a minimum, procedures and techniques for:

(a) well construction and completion;

(b) decontamination of drilling and sampling equipment;

(c) sample collection;

(d) sample preservation and shipment;

(e) analytical procedures and quality assurance;

(f) chain of custody control or sample tracking, as approved by the Executive Secretary; and

(g) procedures to ensure employee health and safety during well installation and monitoring.

(4) Each facility shall utilize a laboratory, that is certified by the state for the test methods used, to complete tests, using methods with appropriate detection levels, on samples for the following:

(a) during the first year of facility operation after wells are installed or an alternative schedule as approved by the Executive Secretary, a minimum of eight independent samples from the upgradient and four independent samples from each downgradient well for all parameters listed in Section R315-308-4 to establish background concentrations;

(b) after background levels have been established, a minimum of one sample, semiannually, from each well, background and downgradient, for all parameters listed in Section R315-308-4 as a detection monitoring program.

(i) In the detection monitoring program, the owner or operator must determine ground water quality at each monitoring well on a semiannual basis during the life of an active area, including the closure period, and the post-closure care period.

(ii) The owner or operator must express the ground water quality at each monitoring well in a form appropriate for the determination of statistically significant changes;

(c) field measured pH, water temperature, and water conductivity must accompany each sample collected;

(d) analysis for the heavy metals and the organic constituents from Section R315-308-4 shall be completed on unfiltered samples; and

(e) the Executive Secretary may specify additional or fewer constituents depending upon the nature of the ground water or the waste on a site specific basis considering:

(i) the types, quantities, and concentrations of constituents in wastes managed at the landfill;

(ii) the mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the landfill;

(iii) the detectability of indicator parameters, waste constituents, and reaction products in the ground water; and

(iv) the background concentration or values and coefficients of variation of monitoring parameters or constituents in the ground water.

(f) The following information shall be placed in the facility's operating record and a copy submitted to the Executive Secretary as the ground water monitoring results to be included in the annual report required by Subsection R315-302-2(4)(e):

(i) a report on the procedures, including the quality

control/quality assurance, followed during the collection of the ground water samples;

(ii) the results of the field measured parameters required by Subsections R315-308-2(4)(c) and R315-308-2(6);

(iii) a report of the chain of custody and quality control/quality assurance procedures of the laboratory;

(iv) the results of the laboratory analysis of the constituents specified in Section R315-308-4 or an alternative list of constituents approved by the Executive Secretary;

(A) the results of the laboratory analysis shall list the constituents by name and CAS number; and

(B) list the detection limits and the test method used; and

(v) the statistical analysis of the results of the ground water monitoring as required by Subsection R315-308-2(7).

(vi) The results of the ground water monitoring may be submitted in electronic format.

(5) After background constituent levels have been established, a ground water quality protection standard shall be set by the Executive Secretary which shall become part of the ground water monitoring plan. The ground water quality protection standard will be set as follows.

(a) For constituents with background levels below the standards listed in Section R315-308-4 or as listed in Section R315-308-5, which presents the ground water protection standards that are available for the constituents listed as Appendix II in 40 CFR 258, the ground water quality standards of Sections R315-308-4 and R315-308-5 shall be the ground water quality protection standard.

(b) If a constituent is detected and a background level is established but the water quality standard for the constituent is not included in Section R315-308-4 or Section R315-308-5 or the constituent has a background level that is higher than the value listed in Section R315-308-4 or Section R315-308-5 for that constituent, the ground water quality protection standard for that constituent shall be set according to health risk standards.

(6) The ground water monitoring program must include a determination of the ground water surface elevation each time ground water is sampled.

(7) The owner or operator shall use a statistical method for determining whether a significant change has occurred as compared to background. The Executive Secretary will approve such a method as part of the ground water monitoring plan. Possible statistical methods include:

(a) a parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent;

(b) an analysis of variance (ANOVA) based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent;

(c) a tolerance or prediction interval procedure in which an interval for each constituent is established from the distribution of the background data, and the level of each constituent in each compliance well is compared to the upper tolerance or

prediction limit;

(d) a control chart approach that gives control limits for each constituent; or

(e) another statistical test method approved by the Executive Secretary.

(8) For both detection monitoring, as described in Subsection R315-308-2(4), and assessment monitoring, as described in Subsection R315-308-2(11), the Executive Secretary may specify additional or fewer sampling and analysis events, no less than annually, depending upon the nature of the ground water or the waste on a site specific basis considering:

(a) lithology of the aquifer and unsaturated zone;

(b) hydraulic conductivity of the aquifer and unsaturated zone;

(c) ground water flow rates;

(d) minimum distance between upgradient edge of the landfill unit and downgradient monitoring well screen (minimum distance of travel); and

(e) resource value of the aquifer.

(9) The owner or operator must determine and report the ground water flow rate and direction in the upper most aquifer each time the ground water is sampled.

(10) If the owner or operator determines that there is a statistically significant increase over background in any parameter or constituent at any monitoring well at the compliance point, the owner or operator must:

(a) within 14 days of the completion of the statistical analysis of the sample results and within 30 days of the receipt of the sample results, enter the information in the operating record and notify the Executive Secretary of this finding in writing. The notification must indicate what parameters or constituents have shown statistically significant changes; and

(b) immediately resample the ground water in all monitoring wells, both background and downgradient, or in a subset of wells specified by the Executive Secretary, and determine:

(i) the concentration of all constituents listed in Section R315-308-4, including additional constituents that may have been identified in the approved ground water monitoring plan;

(ii) if there is a statistically significant increase over background of any parameter or constituent in any monitoring well at the compliance point; and

(iii) notify the Executive Secretary in writing within seven days of the completion of the statistical analysis of the sample results.

(c) The owner or operator may demonstrate that a source other than the solid waste disposal facility caused the contamination or that the statistically significant change resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be certified by a qualified ground-water scientist and approved by the Executive Secretary and entered in the operating record. If a successful demonstration is made and documented, the owner or operator may continue monitoring as specified in Subsection R315-308-2(4)(b).

(11) If, after 90 days, a successful demonstration as stipulated in Subsection R315-308-2(10)(c) is not made, the owner or operator must initiate the assessment monitoring

program required as follows:

(a) within 14 days of the determination that a successful demonstration is not made, take one sample from each downgradient well and analyze for all constituents listed as Appendix II in 40 CFR Part 258, 2001 ed., which is adopted and incorporated by reference.

(b) for any constituent detected from Appendix II, 40 CFR Part 258, in the downgradient wells a minimum of four independent samples from the upgradient and four independent samples from each downgradient well must be collected, analyzed, and statistically evaluated to establish background concentration levels for the constituents; and

(c) within 14 days of the completion of the statistical analysis of the sample results and within 30 days of the receipt of the sample results, place a notice in the operation record and notify the Executive Secretary in writing identifying the Appendix II, 40 CFR Part 258, constituents and their concentrations that have been detected as well as background levels. The Executive Secretary shall establish a ground water quality protection standard pursuant to Subsection R315-308-2(5) for any Appendix II, 40 CFR Part 258, constituent detected in the downgradient wells.

(d) The owner or operator shall thereafter resample:

(i) at a minimum, all downgradient wells on a quarterly basis for all constituents in Section R315-308-4, or the alternative list that may have been approved as part of the permit, and for those constituents detected from Appendix II, 40 CFR Part 258;

(ii) the downgradient wells on an annual basis for all constituents in Appendix II, 40 CFR Part 258; and

(iii) statistically analyze the results of all ground water monitoring samples.

(e) The Executive Secretary may specify additional or fewer constituents depending upon the nature of the ground water or the waste on a site specific basis considering:

(i) the types, quantities, and concentrations of constituents in wastes managed at the landfill;

(ii) the mobility, stability, and persistence of waste constituents or their reaction products in the unsaturated zone beneath the landfill;

(iii) the detectability of indicator parameters, waste constituents, and reaction products in the ground water; and

(iv) the background concentration or values and coefficients of variation of monitoring parameters or constituents in the ground water.

(f) If after two consecutive sampling events, the concentrations of all constituents being analyzed in Subsection R315-308-2(11)(d)(i) are shown to be at or below established background values, the owner or operator must notify the Executive Secretary of this finding and may, upon the approval of the Executive Secretary, return to the monitoring schedule and constituents as specified in Subsection R315-308-2(4)(b).

(12) If one or more constituents from Section R315-308-4 or the approved alternative list, or from those detected from Appendix II, 40 CFR Part 258, are detected at statistically significant levels above the ground water quality protection standard as established pursuant to Subsection R315-308-2(5) in any sampling event, the owner or operator must:

(a) within 14 days of the receipt of this finding, place a notice in the operating record identifying the constituents and

concentrations that have exceeded the ground water quality standard. Within the same time period, the owner or operator must also notify the Executive Secretary and all appropriate local governmental and local health officials that the ground water quality standard has been exceeded;

(b) characterize the nature and extent of the release by installing additional monitoring wells as necessary;

(c) install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well and analyze the sample for the constituents in Section R315-308-4 or the approved alternative list and the detected constituents from Appendix II, 40 CFR Part 258; and

(d) notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site as indicated by sampling of wells in accordance with Subsections R315-308-2(12)(b) and (12)(c).

(e) The owner or operator may demonstrate that a source other than the solid waste disposal facility caused the contamination or that the statistically significant change resulted from error in sampling, analysis, statistical evaluation, or natural variation in ground water quality. A report documenting this demonstration must be certified by a qualified ground-water scientist and approved by the Executive Secretary and entered in the operating record. If a successful demonstration is made, documented and approved, the owner or operator may continue monitoring as specified in Subsection R315-308-2(11)(d) or Subsection R315-308-2(11)(e) when applicable.

R315-308-3. Corrective Action Program.

(1) If, within 90 days, a successful demonstration as stated in Subsection R315-308-2(12)(e) is not made, the owner or operator must:

(a) continue to monitor as required in Subsection R315-308-2(11)(d).

(b) take any interim measures as required by the Executive Secretary or as necessary to ensure the protection of human health and the environment; and

(c) assess possible corrective action measures for the current conditions and circumstances of the disposal facility, addressing at least the following:

(i) the performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control exposure to any residual contamination;

(ii) time required to begin and complete the remedy;

(iii) the costs of remedy implementation;

(iv) public health or environmental requirements that may substantially affect implementation of the remedy; and

(v) prior to the selection of a remedy, discuss the results of the corrective measures assessment in a public meeting with interested and affected parties.

(d) Based on the results of the corrective measures assessment conducted and the comments received in the public meeting, the owner or operator must select a remedy which shall be submitted to the Executive Secretary.

(i) The corrective action remedy must:

(A) be protective of human health and the environment;

(B) use permanent solutions that are within the capability

of best available technology;

(C) attain the established ground water quality standard;

(D) control the sources of release so as to reduce or eliminate, to the maximum extent practicable, further releases of contaminants into the environment that may pose a threat to human health or the environment; and

(E) be approved by the Executive Secretary.

(ii) Within 14 days after the selection of the remedy the owner or operator must:

(A) amend the corrective action program required by Subsection R315-302-2(2)(e) if necessary and send a report to the Executive Secretary for approval describing the selected remedy and amendments, along with a schedule of implementation and estimated time of completion; and

(B) put in place the financial assurance mechanism as required by Rule R315-309 for corrective action and notify the Executive Secretary of the financial assurance mechanism and its effective date.

(2) Upon approval of the selected corrective action remedy, the Executive Secretary will notify the owner or operator of such approval and will require that the corrective action plan proceed according to the approved schedule.

(a) The Executive Secretary may also require facility closure if the ground water quality standard is exceeded and, in addition, may revoke any permit and require reapplication.

(b) The Executive Secretary or the owner or operator may determine, based on information developed after implementation of the corrective action plan, that compliance

with the requirements of Subsection R315-308-3(1)(d)(i) of this section are not being achieved through the remedy selected. In such cases, the owner or operator must implement other methods or techniques, upon approval by the Executive Secretary, that could practicably achieve compliance with the requirements.

(c) Upon completion of the remedy, the owner or operator must notify the Executive Secretary. The notification must contain certification signed by the owner or operator and a qualified ground-water scientist that the concentration of contaminant constituents have been reduced to levels below the specified limits of the ground water quality standard for a period of three years or an alternative length of time specified by the Executive Secretary. Upon approval of the Executive secretary the owner or operator shall:

(i) terminate corrective action measures;

(ii) continue detection monitoring as required in Subsection R315-308-2(4)(b); and

(iii) be released from the requirements of financial assurance for corrective action.

R315-308-4. Constituents for Detection Monitoring.

The table lists the constituents for detection monitoring as specified by Subsection R315-308-2(4), the CAS number for the constituents, and the ground water quality standard for the constituents for any facility that is required to monitor ground water under Rule R315-308.

TABLE
Constituents for Detection Monitoring

	CAS	Ground Water Protection Standard (mg/l)
Inorganic Constituents		
Ammonia (as N)	7664-41-7	
Carbonate/Bicarbonate		
Calcium		
Chemical Oxygen Demand (COD)		
Chloride		
Iron	7439-89-6	
Magnesium		
Manganese	7439-96-5	
Nitrate (as N)		
pH		
Potassium		
Sodium		
Sulfate		
Total Dissolved Solids (TDS)		
Total Organic Carbon (TOC)		
Heavy Metals		
Antimony	7440-36-0	0.006
Arsenic	7440-38-2	0.05
Barium	7440-39-3	2
Beryllium	7440-41-7	0.004
Cadmium	7440-43-9	0.005
Chromium		0.1
Cobalt	7440-48-4	2
Copper	7440-50-8	1.3

Lead		0.015
Mercury	7439-97-6	0.002
Nickel	7440-02-0	0.1
Selenium	7782-49-2	0.05
Silver	7440-22-4	0.1
Thallium		0.002
Vanadium	7440-62-2	0.3
Zinc	7440-66-6	5
Organic Constituents		
Acetone	67-64-1	4
Acrylonitrile	107-13-1	0.1
Benzene	71-43-2	0.005
Bromochloromethane	74-97-5	0.01
Bromodichloromethane ¹	75-27-4	0.1
Bromoform ¹	75-25-2	0.1
Carbon disulfide	75-15-0	4
Carbon tetrachloride	56-23-5	0.005
Chlorobenzene	108-90-7	0.1
Chloroethane	75-00-3	15
Chloroform ¹	67-66-3	0.1
Dibromochloromethane ¹	124-48-1	0.1
1,2-Dibromo-3-chloropropane	96-12-8	0.0002
1,2-Dibromoethane	106-93-4	0.00005
1,2-Dichlorobenzene (ortho)	95-50-1	0.6
1,4-Dichlorobenzene (para)	106-46-7	0.075
trans-1,4-Dichloro-2-butene	110-57-6	
1,1-Dichloroethane	75-34-3	4
1,2-Dichloroethane	107-06-2	0.005
1,1-Dichloroethylene	75-35-4	0.007
cis-1,2-Dichloroethylene	156-59-2	0.07
trans-1,2-Dichloroethylene	156-60-5	0.1
1,2-Dichloropropane	78-87-5	0.005
cis-1,3-Dichloropropene	10061-01-5	0.002
trans-1,3-Dichloropropene	10061-02-6	0.002
Ethylbenzene	100-41-4	0.7
2-Hexanone	591-78-6	1.5
Methyl bromide	74-83-9	0.01
Methyl chloride	74-87-3	0.003
Methylene bromide	74-95-3	0.4
Methylene chloride	75-09-2	0.005
Methyl ethyl ketone	78-93-3	0.17
Methyl iodide	74-88-4	
4-Methyl-2-pentanone	108-10-1	3
Styrene	100-42-5	0.1
1,1,1,2-Tetrachloroethane	630-20-6	0.07
1,1,2,2-Tetrachloroethane	79-34-5	0.005
Tetrachloroethylene	127-18-4	0.005
Toluene	108-88-3	1
1,1,1-Trichloroethane	71-55-6	0.2
1,1,2-Trichloroethane	79-00-5	0.005
Trichloroethylene	79-01-6	0.005
Trichlorofluoromethane	75-69-4	10
1,2,3-Trichloropropane	96-18-4	0.04
Vinyl acetate	108-05-4	37

Vinyl Chloride	75-01-4	0.002
Xylenes	1330-20-7	10

¹ The ground water protection standard of 0.1 mg/l is for the total of Bromodichloromethane, Bromoform, Chloroform, and Dibromochloromethane.

R315-5. Solid Waste Ground Water Quality Protection Standards for 40 CFR 258 Appendix II Constituents.

The table lists the CAS number for each constituent and the ground water quality protection standards which are currently

available for the 40 CFR 258 Appendix II constituents required for assessment monitoring of ground water at a solid waste facility as specified by Subsection R315-308-2(11).

TABLE

Appendix II Protection Standards

Appendix II Constituent	CAS	Ground Water Protection Standard (mg/l)
2,4-D	94-75-7	0.07
2,4,5-T	93-76-5	36.5
2,4,5-T	93-72-1	0.05
Benzo[a]pyrene	50-32-8	0.0002
bis(2-Ethylhexy)phthalate	117-81-7	0.006
Chlordane	57-74-9	0.002
Cyanide	57-12-5	0.2
Dinoseb	88-85-7	0.007
Endrin	72-20-8	0.002
Heptachlor	76-44-8	0.0004
Heptachlor epoxide	1024-57-3	0.0002
Hexachlorobenzene	118-74-1	0.001
Hexachlorocyclopentadiene	77-47-4	0.05
Lindane	58-89-9	0.0002
Methoxychlor	72-43-5	0.04
Pentachlorophenol	87-86-5	0.001
Polychlorinated biphenyls(PCBs)	1336-36-3	0.0005
Tin	7440-31-5	21.9
Toxaphene	8001-35-2	0.003
1,2,4-Trichlorobenzene	120-82-1	0.07

**KEY: solid waste management, waste disposal
June 15, 2002**

**19-6-105
40 CFR 258**

R315. Environmental Quality, Solid and Hazardous Waste.

R315-309. Financial Assurance.

R315-309-1. Applicability.

(1) The owner or operator of any solid waste disposal facility requiring a permit shall establish financial assurance sufficient to assure adequate closure, post-closure care, and corrective action, if required, of the facility by compliance with one or more financial assurance mechanisms acceptable to and approved by the Executive Secretary.

(2) Financial assurance is not required for a solid waste disposal facility that is owned or operated by the State of Utah or the Federal government.

(3) Existing Facilities.

(a) An existing facility shall have the financial assurance mechanism in place and effective according to the compliance schedule as established for the facility by the Executive Secretary.

(b) In the case of corrective action, the financial assurance mechanism shall be in place and effective no later than 120 days after the corrective action remedy has been selected.

(4) A new facility or an existing facility seeking lateral expansion shall have the financial assurance mechanism in place and effective before the initial receipt of waste at the facility or the lateral expansion.

R315-309-2. General Requirements.

(1) A financial assurance plan, including the assurance mechanism proposed for use, shall be submitted:

(a) for new facilities, upon initial permit application; and

(b) for existing facilities, to meet the effective dates specified in Subsection R315-309-1(3).

(2) The financial assurance shall be updated each year as part of the annual report required by Subsection R315-302-2(4) to adjust for inflation or facility modification that would affect closure or post-closure care costs. The annual update of the financial assurance shall be reviewed and must be approved by the Executive Secretary prior to implementation.

(3) Financial assurance cost estimates shall be based on a third party performing closure or post-closure care.

(a) The closure cost estimate shall be based on the most expensive cost to close the largest area of the disposal facility ever requiring a final cover at any time during the active life in accordance with the closure plan and at a minimum must contain the following elements if applicable:

(i) the cost of obtaining, moving, and placing the cover material;

(ii) the cost of final grading of the cover material;

(iii) the cost of moving and placing topsoil on the final cover;

(iv) the cost of fertilizing, seeding, and mulching or other approved method; and

(v) the cost of removing any stored items or materials, buildings, equipment, or other items or materials not needed at the closed facility.

(b) The post-closure care cost estimate shall be based on the most expensive cost of completing the post-closure care reasonably expected during the post-closure care period and must contain the following elements:

(i) ground water monitoring, if required, including number of monitor wells, parameters to be monitored, frequency of sampling, and cost per sampling;

(ii) leachate monitoring and treatment if necessary;

(iii) gas monitoring and control if required; and

(iv) cover stabilization which will include an estimate of the area and cost for expected annual work to repair residual settlement, control erosion, or reseed.

(4) Any facility for which financial assurance is required for post-closure care must have a financial assurance mechanism, which will cover the costs of post-closure care, in effect and active until the Executive Secretary determines that the post-closure care is complete.

(5) Financial assurance for corrective action shall be required only in cases of known releases of contaminants from a facility and shall be a current cost estimate for corrective action based on the most expensive cost of a third party performing the corrective action that may be required.

R315-309-3. General Requirements for Financial Assurance Mechanisms.

(1) Any financial assurance mechanism in place for a solid waste facility:

(a) must be legally valid, binding, and enforceable under Utah and Federal law;

(b) must ensure that funds will be available in a timely fashion when needed; and

(c) any financial assurance mechanism that guarantees payment rather than performance, but does not allow the Executive Secretary to approve partial payments to a third party, shall establish a standby trust at the time the financial assurance mechanism is established.

(i) In the case of a financial assurance mechanism for which the establishment of a standby trust is required, the standby trust fund shall meet the requirements of Subsections R315-309-4(1), (2), and (4).

(ii) Payments from the financial assurance mechanism shall be deposited directly into the standby trust fund and payments from the standby trust fund must be approved by the Executive Secretary and the trustee.

(2) The owner or operator of a solid waste facility that is required to provide financial assurance:

(a) shall submit the required documentation of the financial assurance mechanism to the Executive Secretary; and

(b) prior to the financial assurance mechanism becoming effective and active for a solid waste facility, the mechanism must be approved by the Executive Secretary.

(3) The owner or operator of a solid waste facility may establish financial assurance by any mechanism that meets the requirements of Subsection R315-309-1(1) as approved by the Executive Secretary.

(4) The owner or operator of a solid waste facility may establish financial assurance by a combination of mechanisms that together meet the requirements of Subsection R315-309-1(1) as approved by the Executive Secretary. Except for the conditions specified in Subsection R315-309-8(6)(c), financial assurance mechanisms guaranteeing performance, rather than payment, may not be combined with other instruments.

R315-309-4. Trust Fund.

(1) The owner or operator of a solid waste facility may establish a trust fund and appoint a trustee as a financial assurance mechanism. The trust fund and trustee must be with an entity that has the authority to establish trust funds and act as a trustee and whose operations are regulated and examined by a Federal or state agency.

(2) The owner or operator shall submit a signed original of the trust agreement to the Executive Secretary for approval and shall place a signed original of the trust agreement in the operating record of the solid waste disposal facility.

(3) Payments into the trust fund must be made annually by the owner or operator according to the following schedule:

(a) for a trust fund for closure and post-closure care, annual payments that will ensure the availability of sufficient funds within five years of permit approval for the cost estimates required in Subsection R315-309-2(3). The initial payment into the trust fund must be made, for a new facility or a lateral expansion of an existing facility, before the initial receipt of waste and for an existing facility, in accordance with the effective dates specified in Subsection R315-309-1(3)(a); or

(b) for a trust fund for corrective action, annual payments that will ensure the availability of sufficient funds within one-half of the estimated length in years of the corrective action program for the cost estimate required by Subsection R315-309-2(5). The first payment shall be at least equal to one-half of the current cost estimate for the corrective action divided by one-half the estimated length of the corrective action program. The initial payment into the trust fund shall be made in accordance with the schedule specified in Subsection R315-309-1(3)(b).

(4) The owner or operator, or other person authorized to conduct closure, post-closure, or corrective action may request reimbursement from the trustee for closure, post-closure, or corrective action costs.

(a) Prior to the release of funds by the trustee, the request for reimbursement must be approved by the Executive Secretary. The Executive Secretary shall act

upon the reimbursement request within 30 days of receiving the request.

(b) After receiving approval from the Executive Secretary, the request for reimbursement may be granted by the trustee only if sufficient funds are remaining to cover the remaining costs and if justification and documentation of the costs is placed in the operating record.

(c) The owner or operator shall notify the Executive Secretary that documentation for the reimbursement has been placed in the operating record and that the reimbursement has been received.

R315-309-5. Surety Bond Guaranteeing Payment or Performance.

(1) The owner or operator of a solid waste facility may provide a surety bond for a financial assurance mechanism. The bond must be effective, for a new facility or a lateral expansion of an existing facility, before the initial receipt of waste or, for an existing facility, in accordance with the effective dates specified in Subsection R315-309-1(3).

(2) The surety company issuing the bond must, at a minimum, be among those listed as acceptable sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury and the owner or operator must notify the Executive Secretary that a copy of the bond has been placed in the operating record.

(3) The penal sum of the bond must be in an amount at least equal to the closure, post-closure, or corrective action cost estimates of Subsection R315-309-2(3) or Subsection R315-309-2(5), whichever is applicable.

(4) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond.

(a) In the case of a payment bond, the surety shall pay the costs of closure and post-closure care if the owner or operator fails to complete closure and post-closure care activities.

(b) In the case of a performance bond, the surety shall perform closure and post-closure care on behalf of the owner or operator if the owner or operator fails to complete closure and post-closure care activities.

(5) The surety bond guaranteeing payment or performance shall contain provisions preventing cancellation except under the following conditions:

(a) if the surety sends notice of cancellation by certified mail to the owner or operator and the Executive Secretary 120 days in advance of the cancellation date; or

(b) if an alternative financial assurance mechanism has been obtained by the owner or operator.

R315-309-6. Insurance.

(1) The owner or operator of a solid waste facility may provide insurance as a financial assurance mechanism. The insurance must be effective, for a new

facility or a lateral expansion of an existing facility, before the initial receipt of waste or, for an existing facility, in accordance with the effective dates specified in Subsection R315-309-1(3).

(2) At a minimum, the insurer must be licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states, and the owner or operator must notify the Executive Secretary that a copy of the insurance policy has been placed in the operating record.

(3) The insurance policy must guarantee that funds will be available to close the facility or unit and provide post-closure care or provide corrective action, if applicable. The policy must also guarantee that the insurer will be responsible for paying out funds to the owner or operator or other person authorized to conduct closure, post-closure, or corrective action, if applicable, up to an amount equal to the face amount of the policy.

(4) The insurance policy must be issued for a face amount at least equal to the closure, post-closure, or corrective action cost estimates required by Subsection R315-309-2(3) or Subsection R315-309-2(5), whichever is applicable.

(5) An owner or operator, or other authorized person may receive reimbursements for closure, post-closure, or corrective action, if applicable, if the remaining value of the policy is sufficient to cover the remaining costs of the work required and if justification and documentation of the cost is placed in the operating record. The owner or operator must notify the Executive Secretary that the documentation and justification for the reimbursement has been placed in the operating record and that the reimbursement has been received.

(6) Each policy must contain a provision allowing assignment of the policy to a successor owner or operator.

(7) The insurance policy must provide that the insurer may not cancel, terminate, or fail to renew the policy except for failure to pay the premium. If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the owner or operator and the Executive Secretary 120 days in advance of cancellation. If the insurer cancels the policy, the owner or operator must obtain alternate financial assurance.

R315-309-7. Letter of Credit.

(1) The owner or operator of a solid waste facility may provide a letter of credit as a financial assurance mechanism. The letter of credit must be irrevocable and issued for a period of at least one year in the amount at least equal to the current cost estimate as required by Subsection R315-309-2(3) for closure and post-closure care or the cost estimate as required by Subsection R315-309-2(5) for corrective action, if necessary.

(2) The institution issuing the letter of credit must

be an entity which has the authority to issue a letter of credit and whose operations are regulated and examined by a Federal or state agency.

(3) The letter of credit must be effective for closure and post-closure care:

(a) for a new facility or a lateral expansion of an existing facility, before the initial receipt of waste;

(b) for an existing facility, in accordance with the effective dates specified in Subsection R315-309-1(3)(a); and

(c) for corrective action, in accordance with the schedule specified in Subsection R315-309-1(3)(b).

(4) The letter of credit must provide that the expiration date will be automatically extended for a period of at least one year unless the issuing institution has elected not to extend the letter of credit by sending notice by certified mail to the owner or operator and the Executive Secretary 120 days in advance of the expiration.

(5) If the letter of credit is not extended by the issuing institution, the owner or operator shall obtain alternate financial assurance which will become effective on or before the expiration date.

R315-309-8. Local Government Financial Test.

(1) The terms used in Section R315-309-8 are defined as follows.

(a) "Total revenues" means the revenues from all taxes and fees but does not include the proceeds from borrowing or asset sales, excluding revenue from funds managed by local government on behalf of a specific third party.

(b) "Total expenditures" means all expenditures excluding capital outlays and debt repayments.

(c) "Cash plus marketable securities" means all the cash plus marketable securities held by the local government on the last day of a fiscal year, excluding cash and marketable securities designated to satisfy past obligations such as pensions.

(d) "Debt service" means the amount of principal and interest due on a loan in a given time period, typically the current year.

(2) A local government owner or operator of a solid waste facility may demonstrate financial assurance up to the current cost estimate as required by Subsection R315-309-2(3) for closure and post-closure care and the cost estimate as required by Subsection R315-309-2(5) for corrective action, if required, or up to the amount specified in Subsection R315-309-8(6), which ever is less, by meeting the following requirements.

(a) If the local government has outstanding, rated general obligation bonds that are not secured by insurance, a letter of credit, or other collateral or other guarantee, it must have a current rating of Aaa, Aa, A, or Baa, as issued by Moody's or AAA, AA, A, or BBB, as issued by Standard and Poor's on such general obligation bonds.

(b) If the local government has no outstanding general obligation bonds, the local government shall

satisfy each of the following financial ratios based on the local government's most recent audited annual financial statement:

(i) a ratio of cash plus marketable securities to total expenditures greater than or equal to 0.05; and

(ii) a ratio of annual debt service to total expenditures less than or equal to 0.20.

(c) The local government must prepare its financial statements in conformity with Generally Accepted Accounting Principles for governments and have its financial statements audited by an independent certified public accountant.

(d) The local government must place a reference to the closure and post-closure care costs assured through the financial test into the next comprehensive annual financial report and in every subsequent comprehensive annual financial report during the time in which closure and post-closure care costs are assured through the financial test. A reference to corrective action costs must be placed in the comprehensive annual financial report not later than 120 days after the corrective action remedy has been selected. The reference to the closure and post-closure care costs shall contain:

(i) the nature and source of the closure and post-closure care requirements;

(ii) the reported liability at the balance sheet date;

(iii) the estimated total closure and post-closure care costs remaining to be recognized;

(iv) the percentage of landfill capacity used to date; and

(v) the estimated landfill life in years.

(3) A local government is not eligible to assure closure, post-closure care, or corrective action costs at its solid waste disposal facility through the financial test if it:

(a) is currently in default on any outstanding general obligation bonds, or

(b) has any outstanding general obligation bonds rated lower than Baa as issued by Moody's or BBB as issued by Standard and Poor's; or

(c) has operated at a deficit equal to 5%, or more, of the total annual revenue in each of the past two fiscal years; or

(d) receives an adverse opinion, disclaimer of opinion, or other qualified opinion from the independent certified public accountant, or appropriate state agency auditing its financial statement. The Executive Secretary may evaluate qualified opinions on a case-by-case basis and allow use of the financial test in cases where the Executive Secretary deems the qualification insufficient to warrant disallowance of use of the test.

(4) The local government owner or operator must submit the following items to the Executive Secretary for approval and place a copy of these items in the operating record of the facility:

(a) a letter signed by the local government's chief financial officer that:

(i) lists all current cost estimates covered by a

financial test; and

(ii) provides evidence and certifies that the local government meets the requirements of Subsections R315-309-8(2) and R315-309-8(6);

(b) the local government's independently audited year-end financial statements for the latest fiscal year including the unqualified opinion of the auditor, who must be an independent certified public accountant;

(c) a report to the local government from the local government's independent certified public accountant stating the procedures performed and the findings relative to:

(i) the requirements of Subsections R315-309-8(2)(c) and R315-309-8(3)(c) and (d); and

(ii) the financial ratios required by Subsection R315-309-8(2)(b), if applicable; and

(d) a copy of the comprehensive annual financial report used to comply with Subsection R315-309-8(2)(d).

(e) The items required by Subsection R315-309-8(4) are to be submitted to the Executive Secretary and copies placed in the facility's operating record as follows:

(i) in the case of closure and post-closure care, for a new facility or a lateral expansion of an existing facility, before the initial receipt of waste;

(ii) in the case of closure and post-closure care, for an existing facility, in accordance with the effective dates specified in Subsection R315-309-1(3)(a); and

(iii) in the case of corrective action, in accordance with the schedule specified in Subsection R315-309-1(3)(b).

(5) A local government must satisfy the requirements of the financial test at the close of each fiscal year.

(a) The items required in Subsection R315-309-8(4) shall be submitted as part of the facility's annual report required by Subsection R315-302-2(4).

(b) If the local government no longer meets the requirements of the local government financial test it shall, within 210 days following the close of the local government's fiscal year:

(i) obtain alternative financial assurance that meets the requirements of R315-309-1(1); and

(ii) submit documentation of the alternative financial assurance to the Executive Secretary and place copies of the documentation in the facility's operating record.

(c) The Executive Secretary, based on a reasonable belief that the local government may no longer meet the requirements of the local government financial test, may require additional reports of financial condition from the local government at any time. If the Executive Secretary finds that the local government no longer meets the requirements of the local government financial test, the local government shall be required to provide alternative financial assurance on a schedule established by the Executive Secretary.

(6) The portion of the closure, post-closure, and

corrective action costs for which a local government owner or operator may assume under the local government financial test is determined as follows:

(a) If the local government does not assure other environmental obligations through a financial test, it may assure closure, post-closure, and corrective action costs that equal up to 43% of the local government's total annual revenue.

(b) If the local government assures any other environmental obligation through a financial test, it must add those costs to the closure, post-closure, and corrective action costs it seeks to assure by local government financial test. The total that may be assured must not exceed 43% of the local government's total annual revenue.

(c) The local government shall obtain an alternate financial assurance mechanism for those costs that exceed 43% of the local government's total annual revenue.

(7) Local Government Guarantee.

(a) An owner or operator of a solid waste facility may demonstrate financial assurance for closure, post-closure, and corrective action by obtaining a written guarantee provided by a local government. The local government providing the guarantee shall meet the requirements of the local government financial test in Section R315-309-8 and shall comply with the terms of the written guarantee as specified in Subsections R315-309-8(7)(b) and (c).

(b) The guarantee must be effective for closure and post-closure care:

(i) for a new facility or a lateral expansion of an existing facility, before the initial receipt of waste;

(ii) for an existing facility, in accordance with the effective dates specified in Subsection R315-309-1(3)(a); and

(iii) for corrective action, in accordance with the schedule specified in Subsection R315-309-1(3)(b).

(c) The guarantee shall provide that if the owner or operator fails to perform closure, post-closure care, or corrective action of a facility covered by the guarantee, the guarantor will:

(i) perform, or pay a third party to perform, closure, post-closure, or corrective action as required; or

(ii) establish a fully funded trust fund as specified in Section R315-309-4 in the name of the owner or operator.

(d) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Executive Secretary. Cancellation may not occur until 120 days after the date the notice is received by the Executive Secretary.

(e) If the guarantee is canceled, the owner or operator shall, within 90 days following the receipt of the cancellation notice:

(i) obtain alternate financial assurance that meets the requirements of Subsection R315-309-1(1);

(ii) submit documentation of the alternate

financial assurance to the Executive Secretary; and

(iii) place copies of the documentation of the alternate financial assurance in the facility's operating record.

(iv) If the owner or operator fails to provide alternate financial assurance within the 90 day period, the guarantor must provide the alternate financial assurance within 120 days following the guarantor's notice of cancellation, submit documentation of the alternate financial assurance to the Executive Secretary for review and approval, and place copies of the documentation in the facility's operating record.

R315-309-9. Corporate Financial Test.

(1) The terms used specifically in Section R315-309-9 are defined as follows.

(a) "Assets" means all existing and probable future economic benefits obtained or controlled by a particular entity.

(b) "Current assets" means cash or other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business.

(c) "Current liabilities" means obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets or the creation of other current liabilities.

(d) "Current plugging and abandonment cost estimate" means the most recent of the estimates prepared in accordance with 40 CFR 144.62(a), (b), and (c) (2001) which is adopted and incorporated by reference.

(e) "Independently audited" means an audit performed by and independent certified public accountant in accordance with generally accepted auditing standards.

(f) "Liabilities" means probable future sacrifices of economic benefits arising from present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.

(g) "Net working capital" means current assets minus current liabilities.

(h) "Net worth" means total assets minus total liabilities and is equivalent to owner's equity.

(i) "Tangible net worth" means the tangible assets that remain after deducting liabilities; such assets would not include intangibles such as goodwill and rights to patents or royalties.

(2) A corporate owner or operator of a solid waste facility may demonstrate financial assurance up to the current cost estimate as required by Subsection R315-309-2(3) for closure and post-closure care and the cost estimate required by Subsection R315-309-2(5) for corrective action, if required, by meeting the following requirements.

(a) The owner or operator must satisfy one of the following three conditions:

(i) a current rating for its senior unsubordinated

debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's; or

(ii) a ratio of less than 1.5 comparing total liabilities to net worth: or

(iii) a ratio of greater than 0.10 comparing the sum of net income plus depreciation, depletion and amortization, minus \$10 million, to total liabilities.

(b) The tangible net worth of the owner or operator must be greater than:

(i) the sum of the current closure, post-closure care, and corrective action cost estimates and any other environmental obligation, including guarantees, covered by a financial test plus \$10 million except as provided in Subsection R315-309-9(2)(b)(ii);

(ii) \$10 million in net worth plus the amount of any guarantees that have not been recognized as liabilities on the financial statements provided all of the current closure, post-closure care, and corrective action costs and any other environmental obligations covered by a financial test are recognized as liabilities on the owner's or operator's audited financial statements, and subject to the approval of the Executive Secretary.

(c) The owner or operator must have assets located in the United States amounting to at least the sum of current closure, post-closure care, corrective action cost estimates and any other environmental obligations covered by a financial test.

(3) The owner or operator must place the following items into the facility's operating record and submit a copy of these items to the Executive Secretary for approval:

(a) a letter signed by the owner's or operator's chief financial officer that:

(i) lists all current cost estimates for closure, post-closure care, corrective action, and any other environmental obligations covered by a financial test; and

(ii) provides evidence demonstrating that the firm meets the conditions of Subsection R315-309-9(2)(a)(i), or (a)(ii), or (a)(iii) and Subsections R315-309-9(2)(b) and (c); and

(b) a copy of the independent certified public accountant's unqualified opinion of the owner's or operator's financial statements for the latest completed fiscal year.

(i) To be eligible to use the financial test, the owner's or operator's financial statements must receive an unqualified opinion from the independent certified public accountant.

(ii) The Executive Secretary may evaluate qualified opinions on a case-by-case basis and allow use of the financial test where the Executive Secretary deems the matters which form the basis for the qualification are insufficient to warrant disallowance of the test.

(c) If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that the owner or operator satisfies Subsection R315-309-9(2)(a)(i) or (ii) that are different from data in

the audited financial statements or data filed with the Securities and Exchange Commission, then a special report from the owner's or operator's independent certified public accountant is required. The special report shall:

(i) be based upon an agreed upon procedures engagement in accordance with professional auditing standards;

(ii) describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, year-end financial statements;

(iii) describe the findings of that comparison; and
(iv) explain the reasons for any differences.

(d) If the chief financial officer's letter provides a demonstration that the firm has assured environmental obligations as provided in Subsection R315-309-9(2)(b)(ii), then the letter shall include a report from the independent certified public accountant that:

(i) verifies that all of the environmental obligations covered by a financial test have been recognized as liabilities on the audited financial statements;

(ii) explains how these obligations have been measured and reported; and

(iii) certifies that the tangible net worth of the firm is at least \$10 million plus the amount of all guarantees provided.

(e) The items required by Subsection R315-309-9(3) are to be submitted to the Executive Secretary and copies placed in the facility's operating record as follows:

(i) in the case of closure and post-closure care, for a new facility or a lateral expansion of an existing facility, before the initial receipt of waste;

(ii) in the case of closure and post-closure care, for an existing facility, in accordance with the effective dates specified in Subsection R315-309-1(3)(a); and

(iii) in the case of corrective action, in accordance with the schedule specified in Subsection R315-309-1(3)(b).

(4) A firm must satisfy the requirements of the financial test at the close of each fiscal year by submitting the items required in Subsection R315-309-9(3) as part of the facility's annual report required by Subsection R315-302-2(4).

(5) If the firm no longer meets the requirements of the corporate financial test it shall, within 120 days following the close of the firm's fiscal year:

(a) obtain alternative financial assurance that meets the requirements of R315-309-1(1); and

(b) submit documentation of the alternative financial assurance to the Executive Secretary and place copies of the documentation in the facility's operating record.

(c) The Executive Secretary, based on a reasonable belief that the firm may no longer meet the requirements of the corporate financial test, may require additional reports of financial condition from the firm at

any time. If the Executive Secretary finds that the firm no longer meets the requirements of the corporate financial test, firm shall be required to provide alternative financial assurance on a schedule established by the Executive Secretary.

(6) Corporate Guarantee.

(a) A corporate owner or operator of a solid waste facility may demonstrate financial assurance for closure, post-closure care, and corrective action by obtaining a written guarantee provided by a corporation.

(i) The guarantor must be the direct or higher-tier parent corporation of the owner or operator, a firm whose parent corporation is also the parent corporation of the owner or operator, or a firm with a substantial business relationship with the owner or operator.

(ii) The firm shall meet the requirements of the corporate financial test in Section R315-309-9 and shall comply with the terms of the written guarantee as specified in Subsections R315-309-9(6)(b) and (c).

(A) A certified copy of the guarantee along with copies of the letter from the guarantor's chief financial officer and accountant's opinions must be submitted to the Executive Secretary and placed in the facility's operating record.

(B) If the guarantor's parent corporation is also the parent corporation of the owner or operator, the letter from the guarantor's chief financial officer must describe the value received in consideration of the guarantee.

(C) If the guarantor is a firm with a substantial business relationship with the owner or operator, the letter from the chief financial officer must describe this substantial business relationship and the value received in consideration of the guarantee.

(b) The guarantee must be effective for closure and post-closure care:

(i) for a new facility or a lateral expansion of an existing facility, before the initial receipt of waste;

(ii) for an existing facility, in accordance with the effective dates specified in Subsection R315-309-1(3)(a); and

(iii) for corrective action, in accordance with the schedule specified in Subsection R315-309-1(3)(b).

(c) The guarantee shall provide that if the owner or operator fails to perform closure, post-closure care, or corrective action of a facility covered by the guarantee, the guarantor will:

(i) perform, or pay a third party to perform, closure, post-closure, or corrective action as required; or

(ii) establish a fully funded trust fund as specified in Section R315-309-4 in the name of the owner or operator.

(d) The guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the owner or operator and to the Executive Secretary. Cancellation may not occur until 120 days after the date the notice is received by the Executive Secretary.

(e) If the guarantee is canceled, the owner or

operator shall, within 90 days following the receipt of the cancellation notice:

(i) obtain alternate financial assurance that meets the requirements of Subsection R315-309-1(1);

(ii) submit documentation of the alternate financial assurance to the Executive Secretary; and

(iii) place copies of the documentation of the alternate financial assurance in the facility's operating record.

(iv) If the owner or operator fails to provide alternate financial assurance within the 90 day period, the guarantor must provide the alternate financial assurance within 120 days following the guarantor's notice of cancellation, submit documentation of the alternate financial assurance to the Executive Secretary for review and approval, and place copies of the documentation in the facility's operating record.

(f) If a corporate guarantor no longer meets the requirements of the corporate financial test as specified in Section R315-309-9:

(i) the owner or operator must, within 90 days, obtain alternate financial assurance; and

(ii) submit documentation of the alternate financial assurance to the Executive Secretary and place copies of this documentation in the facility's operating record.

(iii) If the owner or operator fails to provide alternate financial assurance within the 90-day period, the guarantor must provide that alternate assurance within the next 30 days.

R315-309-10. Discounting.

(1) The Executive Secretary may allow discounting of closure, post-closure care, or corrective action costs up to the rate of return for essentially risk free investments, net inflation.

(2) Discounting may be allowed under the following conditions:

(a) the Executive Secretary determines that cost estimates are complete and accurate and the owner or operator has submitted a statement from a professional engineer registered in the state of Utah so stating;

(b) the Executive Secretary finds the facility in compliance with all applicable Utah Solid Waste Permitting and Management Rules and in compliance with all conditions of the facility's permit issued under the rules;

(c) the executive Secretary determines that the closure date is certain and the owner or operator certifies that there are no foreseeable factors that will change the estimate of the facility life; and

(d) discounted cost estimates must be adjusted annually to reflect inflation and years of remaining facility life.

R315-309-11. Termination of Financial Assurance.

The owner or operator of a solid waste facility may terminate or cancel an active financial assurance

mechanism under the following conditions:

(1) if the owner or operator establishes alternate financial assurance as approved by the Executive Secretary; or

(2) if the owner or operator is released from the financial assurance requirements by the Executive Secretary after meeting the conditions and requirements of Subsections R315-302-3(7)(b) and (c) or Subsection R315-308-3(2)(c), whichever is applicable.

KEY: solid waste management, waste disposal

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R315. Environmental Quality, Solid and Hazardous Waste.

R315-310. Permit Requirements for Solid Waste Facilities.

R315-310-1. Applicability.

(1) The following solid waste facilities require a permit:

(a) Class I, II, III, IV, V, and VI Landfills;

(b) incinerator facilities that are regulated by Rule R315-306;

(c) landtreatment disposal facilities that are regulated by Rule R315-307; and

(d) waste tire storage facilities.

(2) Permits are not required for corrective actions at solid waste facilities performed by the state or in conjunction with the United States Environmental Protection Agency or in conjunction with actions to implement the Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA), or corrective actions taken by others to comply with a state or federal cleanup order.

(3) The permit requirements of Rule R315-310 apply to each existing solid waste facility, for which a permit is required.

(a) The Executive Secretary may incorporate a compliance schedule for each existing facility to ensure that the owner or operator, or both, of each existing facility meet the requirements of Rule R315-310.

(b) The owner or operator, or both of each new facility or expansion at an existing solid waste facility, for which a permit is required, shall:

(i) apply for a permit according to the requirements of Rule R315-310; and

(ii) not begin the construction or the expansion of the solid waste facility until a permit has been granted; and

(iii) not accept waste at the solid waste facility prior to receiving the approval required by Subsection R315-301-5(1).

(4) A landfill may not change from its current class, or subclass, to any other class, or subclass, of landfill except by meeting all requirements for the desired class, or subclass, to include obtaining a new permit from the Executive Secretary for the desired class, or subclass, of landfill.

R315-310-2. Procedures for Permits.

(1) Prospective applicants may request the Executive Secretary to schedule a pre-application conference to discuss the proposed solid waste facility and application contents before the application is filed.

(2) Any owner or operator who intends to operate a facility subject to the permit requirements must apply for a permit with the Executive Secretary. Two copies of the application, signed by the owner or operator and received by the Executive Secretary are required before permit review can begin.

(3) Applications for a permit must be completed

in the format prescribed by the Executive Secretary.

(4) An application for a permit, all reports required by a permit, and other information requested by the Executive Secretary shall be signed as follows:

(a) for a corporation: by a principal executive officer of at least the level of vice-president;

(b) for a partnership or sole proprietorship: by a general partner or the proprietor;

(c) for a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official; or

(d) by a duly authorized representative of the person above, as appropriate.

(i) A person is a duly authorized representative only if the authorization is made in writing, to the Executive Secretary, by a person described in Subsections R315-310-2(4)(a), (b), or (c), as appropriate.

(ii) The authorization may specify either a named individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of facility manager, director, superintendent, or other position of equivalent responsibility.

(iii) If an authorization is no longer accurate and needs to be changed because a different individual or position has responsibility for the overall operation of the facility, a new authorization that meets the requirements of Subsections R315-310-2(4)(d)(i) and (ii) shall be submitted to the Executive Secretary prior to or together with any report, information, or application to be signed by the authorized representative.

(5) Filing Fee and Permit Review Fee.

(a) A filing fee, as required by the Annual Appropriations Act, shall accompany the filing of an application for a permit. The review of the application will not begin until the filing fee is received.

(b) A review fee, as established by the Annual Appropriations Act, shall be charged at an hourly rate for the review of an application. The review fee shall be billed quarterly and shall be due and payable quarterly.

(6) All contents and materials submitted as a permit application shall become part of the approved permit and shall be part of the operating record of the solid waste disposal facility.

(7) The owner or operator, or both, of a facility shall apply for renewal of the facility's permit every five years.

R315-310-3. General Contents of a Permit Application for a New Facility or a Facility Seeking Expansion.

(1) Each permit application shall contain the following:

(a) the name and address of the applicant, property owner, and responsible party for the site operation;

(b) a general description of the facility accompanied by facility plans and drawings and, except for

Class IIIb, IVb, and Class VI Landfills and waste tire storage facilities, unless required by the Executive Secretary, the facility plans and drawings shall be signed and sealed by a professional engineer registered in the State of Utah;

(c) a legal description and proof of ownership, lease agreement, or other mechanism approved by the Executive Secretary of the proposed site, latitude and longitude map coordinates of the facility's front gate, and maps of the proposed facility site including land use and zoning of the surrounding area;

(d) the types of waste to be handled at the facility and area served by the facility;

(e) the plan of operation required by Subsection R315-302-2(2);

(f) the form used to record weights or volumes of wastes received required by Subsection R315-302-2(3)(a)(i);

(g) an inspection schedule and inspection log required by Subsection R315-302-2(5)(a);

(h) the closure and post-closure plans required by Section R315-302-3;

(i) documentation to show that any waste water treatment facility, such as a run-off or a leachate treatment system, is being reviewed or has been reviewed by the Division of Water Quality; and

(j) a financial assurance plan that meets the requirements of Rule R315-309.

(2) Special Requirements for a Commercial Solid Waste Disposal Facility.

(a) The permit application for a commercial nonhazardous solid waste disposal facility shall contain the information required by Subsections 19-6-108(9) and (10).

(b) Subsequent to the issuance of a solid waste permit by the Executive Secretary, a commercial nonhazardous solid waste disposal facility shall meet the requirements of Subsection 19-6-108(3)(c) and provide documentation to the Executive Secretary that the solid waste disposal facility is approved by the local government, the Legislature, and the governor.

(c) Construction of the solid waste disposal facility may not begin until the requirements of Subsections R315-310-3(2)(b) are met and approval to begin construction has been granted by the Executive Secretary.

(d) Commercial solid waste disposal facilities solely under contract with a local government within the state to dispose of nonhazardous solid waste generated within the boundaries of the local government are not subject to Subsections R315-310-3(2)(a), (b), and (c).

R315-310-4. Contents of a Permit Application for a New or Expanded Class I, II, III, IV, V, and VI Landfill Facility as Specified.

(1) Each application for a new or expanded landfill shall contain the information required by Section R315-310-3.

(2) Each application shall also contain:

(a) the following maps shall be included in a permit application for a Class I, II, III, IV, V, and VI Landfill:

(i) topographic map of the landfill unit drawn to a scale of 200 feet to the inch containing five foot contour intervals where the relief exceeds 20 feet and two foot contour intervals where the relief is less than 20 feet, showing the boundaries of the landfill unit, ground water monitoring wells, landfill gas monitoring points, and borrow and fill areas; and

(ii) the most recent full size U.S. Geological Survey topographic map, 7-1/2 minute series, if printed, or other recent topographic survey of equivalent detail of the area, showing the waste facility boundary, the property boundary, surface drainage channels, existing utilities, and structures within one-fourth mile of the facility site, and the direction of the prevailing winds.

(b) a permit application for a Class I, II, IIIa, IVa, and V Landfill shall contain a geohydrological assessment of the facility that addresses:

(i) local and regional geology and hydrology, including faults, unstable slopes and subsidence areas on site;

(ii) evaluation of bedrock and soil types and properties, including permeability rates;

(iii) depths to ground water or aquifers;

(iv) direction and flow rate of ground water;

(v) quantity, location, and construction of any private and public wells on the site and within 2,000 feet of the facility boundary;

(vi) tabulation of all water rights for ground water and surface water on the site and within 2,000 feet of the facility boundary;

(vii) identification and description of all surface waters on the site and within one mile of the facility boundary;

(viii) background ground and surface water quality assessment and identification of impacts of the existing facility upon ground and surface waters from landfill leachate discharges;

(ix) calculation of a site water balance; and

(x) conceptual design of a ground water and surface water monitoring system, including proposed installation methods for these devices and where applicable, a vadose zone monitoring plan;

(c) a permit application for a Class I, II, IIIa, IVa, and V Landfill shall contain an engineering report, plans, specifications, and calculations that address:

(i) how the facility will meet the location standards pursuant to Section R315-302-1 including documentation of any demonstration made with respect to any location standard;

(ii) the basis for calculating the facility's life;

(iii) cell design to include liner design, cover design, fill methods, elevation of final cover and bottom liner, and equipment requirements and availability;

(iv) identification of borrow sources for daily and final cover, and for soil liners;

(v) interim and final leachate collection, treatment, and disposal;

(vi) ground water monitoring that meet the requirements of Rule R315-308;

(vii) landfill gas monitoring and control that meet the requirements of Subsection R315-303-3(5);

(viii) design and location of run-on and run-off control systems;

(ix) closure and post-closure design, construction, maintenance, and land use; and

(x) quality control and quality assurance for the construction of any engineered structure or feature, excluding buildings at landfills, at the solid waste disposal facility and for any applicable activity such as ground water monitoring.

(d) a permit application for a Class I, II, III, IV, V, and VI Landfill shall contain a closure plan to address:

(i) closure schedule;

(ii) capacity of site in volume and tonnage;

(iii) final inspection by regulatory agencies; and

(iv) identification of closure costs including cost calculations and the funding mechanism.

(e) a permit application for a Class I, II, III, IV, V, and VI Landfill shall contain a post-closure plan to address, as appropriate for the specific landfill:

(i) site monitoring of:

(A) landfill gas on a quarterly basis until the conditions of either Subsection R315-302-3(7)(b) or Subsection R315-302-3(7)(c) are met;

(B) ground water on a semiannual basis, or other schedule as determined by the Executive Secretary, until the conditions of either Subsection R315-302-3(7)(b) or Subsection R315-302-3(7)(c) are met; and

(C) surface water, if required, on the schedule specified by the Executive Secretary and until the Executive Secretary determines that the monitoring of surface water may be discontinued;

(ii) inspections of the landfill by the owner or operator:

(A) for landfills that are required to monitor landfill gas, and Class II Landfills, on a quarterly basis; and

(B) for other landfills that are not required to monitor landfill gas, on a semiannual basis;

(iii) maintenance activities to maintain cover and run-on and run-off systems;

(iv) identification of post-closure costs including cost calculations and the funding mechanism;

(v) changes to record of title as specified by Subsection R315-302-2(6); and

(vi) list the name, address, and telephone number of the person or office to contact about the facility during the post-closure period.

R315-310-5. Contents of a Permit Application for a

New or Expanded Class IV or VI Landfill.

(1) Each application for a Class IV or VI Landfill permit shall contain the information required in Section R315-310-3.

(2) Each application shall also contain an engineering report, plans, specifications, and calculations that address:

(a) the information and maps required by Subsections R315-310-4(2)(a)(i) and (ii);

(b) the design and location of the run-on and run-off control systems;

(c) the information required by Subsections R315-310-4(2)(d) and (e);

(d) the area to be served by the facility; and

(e) how the facility will meet the requirements of Rule R315-305.

(3) Each application for a Class IVa Landfill permit shall also contain the applicable information required in Subsections R315-310-4(2)(b) and (c).

R315-310-6. Contents of a Permit Application for a New or Expanding Landtreatment Disposal Facility.

(1) Each application for a landtreatment disposal facility permit shall contain the information required in Section R315-310-3.

(2) Each application for a permit shall also contain:

(a) a geohydrological assessment of the facility site that addresses all of the factors of Subsection R315-310-4(2)(b);

(b) engineering report, plans, specifications, and calculations that address:

(i) how the proposed facility will meet the location standards pursuant to Section R315-302-1;

(ii) how the proposed facility will meet the standards of Rule R315-307;

(iii) the basis for calculating the facility's life;

(iv) waste analyses and methods to periodically sample and analyze solid waste;

(v) design of interim waste storage facilities;

(vi) design of run-on and run-off control systems;

(vii) a contour map of the active area showing contours to the nearest foot;

(viii) a ground water and surface water monitoring program; and

(ix) access barriers such as fences, gate, and warning signs.

(c) a plan of operation that in addition to the requirements of Section R315-302-2 addresses:

(i) operation and maintenance of run-on and run-off control systems;

(ii) methods of taking ground water samples and for maintaining ground water monitoring systems; and

(iii) methods of applying wastes to meet the requirements of Section R315-307-3.

(d) closure plan to address:

(i) closure schedule;

(ii) capacity of site in volume and tonnage; and

(iii) final inspection by regulatory agencies.

(e) post-closure plan to address:

(i) estimated time period for post-closure activities;

(ii) site monitoring of ground water;

(iii) changes in record of title;

(iv) maintenance activities to maintain cover and run-off system;

(v) plans for food-chain crops, if any, being grown on the active areas, after closure; and

(vi) identification of final closure costs including cost calculations and the funding mechanism.

R315-310-7. Contents of a Permit Application for a New or Expanding Incinerator Facility.

(1) Each application for a new or expanding incinerator facility permit shall contain the information required in Section R315-310-3.

(2) Each application for a permit shall also contain:

(a) engineering report, plans, specifications, and calculations that address:

(i) the design of the storage and handling facilities on-site for incoming waste as well as fly ash, bottom ash, and any other wastes produced by air or water pollution controls; and

(ii) the design of the incinerator or thermal treater, including charging or feeding systems, combustion air systems, combustion or reaction chambers, including heat recovery systems, ash handling systems, and air pollution and water pollution control systems. Instrumentation and monitoring systems design shall also be included.

(b) an operational plan that, in addition to the requirements of Section R315-302-2, addresses:

(i) cleaning of storage areas as required by Subsection R315-306-2(5);

(ii) alternative storage plans for breakdowns as required in Subsection R315-306-2(3);

(iii) inspections to insure compliance with state and local air pollution laws and to comply with Subsection R315-302-2(5)(a). The inspection log or summary must be submitted with the application;

(iv) how and where the fly ash, bottom ash, and other solid waste will be disposed; and

(v) a program for excluding the receipt of hazardous waste equivalent to requirements specified in Subsection R315-303-4(7).

(c) documentation to show that air pollution and water pollution control systems are being reviewed or have been reviewed by the Division of Air Quality and the Division of Water Quality.

(d) a closure plan to address:

(i) closure schedule;

(ii) closure costs and a financial assurance mechanism to cover the closure costs;

- (iii) methods of closure and methods of removing wastes, equipment, and location of final disposal; and
- (iv) final inspection by regulator agencies.

R315-310-8. Contents of a Permit Application for a New or Expanding Waste Tire Storage Facility.

Each application for a waste tire storage facility permit shall contain the information required in Subsections R315-310-3(1)(a), (b), and (c), and Subsection R315-314-3(3).

R315-310-9. Contents of a Permit Application for an Existing Facility or a Permit Renewal.

The owner or operator of each existing facility shall apply for a permit or renewal of their permit by submitting the applicable information and application specified in Sections R315-310-3, -4, -5, -6, -7, or -8, as appropriate. Previous information submitted to the Executive Secretary may be referred to in the application. Changes in operating methods or other changes must be noted in the application in order to be authorized by permit.

R315-310-10. Permit Transfer.

(1) A permit may not be transferred without approval from the Executive Secretary, nor shall a permit be transferred from one property to another.

(2) Application for transfer of a permit shall be made at least 60 days prior to the change of permittee.

(3) The new permittee shall:

(a) assume permit requirements and all financial responsibility;

(b) provide adequate documentation that the operator has or shall have ownership or control of the facility for which the transfer of permit has been requested;

(c) demonstrate adequate knowledge and ability to operate the facility in accordance with the permit conditions; and

(d) demonstrate adequate financial assurance as required in the permit for the operation of the facility.

(4) An application for permit transfer may be denied if the Executive Secretary finds that the applicant has:

(a) knowingly misrepresented a material fact in the application;

(b) refused or failed to disclose any information requested by the Executive Secretary;

(c) exhibited a history of willful disregard of any state or federal environmental law; or

(d) had any permit revoked or permanently suspended for cause under any state or federal environmental law.

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R315. Environmental Quality, Solid and Hazardous Waste.

R315-311. Permit Approval for Solid Waste Disposal, Energy Recovery, and Incinerator Facilities.

R315-311-1. General Requirements.

(1) Upon submittal of the complete plan of operation and supporting information required by Rule R315-310, as determined by the Executive Secretary, a draft permit will be prepared and the owner or operator of the proposed facility will be notified in writing by the Executive Secretary.

(a) After meeting the requirements of the public comment period and public hearing as stipulated in Section R315-311-3, the owner or operator may be issued a permit which will include appropriate conditions and limitations on operation and types of waste to be accepted at the facility.

(b) Construction shall not begin prior to the receipt of the permit.

(c) An application that has been initiated by an owner or operator but left inactive by the applicant for more than one year shall be canceled.

(2) Solid waste disposal facility plan approval and permit issuance will depend upon:

(a) the adequacy of the facility in meeting the location standards in Section R315-302-1;

(b) the hydrology and geology of the area; and

(c) the adequacy of the plan of operation, facility design, and monitoring programs in meeting the requirements of the applicable rules.

(3) A permit can be granted for up to five years by the Executive Secretary. Each facility must apply for a permit renewal, as required by Section R315-310-9, 180 days before the expiration date of the current permit.

R315-311-2. Permit Modification, Renewal, or Termination.

(1) A permit may be considered for modification, renewal, or termination at the request of any interested person, including the permittee, or upon the Executive Secretary's initiative as a result of new information or changes in statutes or rules. Requests for modification, reissuance, or termination shall be submitted in writing to the Executive Secretary and shall contain facts or reasons supporting the request. Requests for permit modification, renewal, or termination shall become effective only upon approval by the Executive Secretary.

(a) Minor modifications of a permit or plan of operation shall not be subject to the 30 day public comment period as required by Section R315-311-3. A permit modification shall be considered minor if:

(i) typographical errors are corrected;

(ii) the name, address, or phone number of persons or agencies identified in the permit are changed;

(iii) administrative or informational changes are made;

(iv) procedures for maintaining the operating record are changed;

(v) changes are made to provide for more frequent monitoring, reporting, sampling, or maintenance;

(vi) a compliance date extension request is for a date not to exceed 120 days after the date specified in the approved permit;

(vii) changes are made in the expiration date of the permit to allow an earlier permit termination.

(viii) changes are made in the closure schedule for a unit, in the final closure schedule for the facility, or the closure period is extended;

(ix) the Executive Secretary determines, in the case of a permit transfer application, that no change in the permit other than the change in the name of the owner or operator is necessary;

(x) equipment is upgraded or replaced with functionally equivalent components;

(xi) changes are made in sampling or analysis methods, procedures, or schedules;

(xii) changes are made in quality control/quality assurance plans which will better certify that the specifications for construction, closure, sampling, or analysis will be met;

(xiii) changes are made in the facility plan of operation which conform to guidance or rules approved by the Board or provide more efficient waste handling or more effective waste screening;

(xiv) an existing monitoring well is replaced with a new well without changing the location;

(xv) changes are made in the design or depth of a monitoring well that provides more effective monitoring; or

(xvi) changes are made in the statistical method used to statistically analyze the ground water data.

(xvii) Other permit modifications shall be considered to be major modifications.

(xviii) The Executive Secretary may subject any minor modification request to the 30 day public comment period if justified by conditions and circumstances.

(b) If the Executive Secretary determines that major modifications to a permit or plan of operation are justified, a new operational plan incorporating the approved modifications shall be prepared. The modifications shall be subject to the public comment period as specified in Section R315-311-3.

(2) An application for permit renewal shall consist of the information required by Section R315-310-9. Upon receipt of the application, the Executive Secretary will review the application and will notify the applicant as to what information or change of operational practice is required of the applicant, if any, to receive a permit renewal. The current permit shall remain in effect until issuance or denial of a new permit. Each permit renewal shall be subject to the public comment requirements of Section R315-311-3.

(3) The Executive Secretary shall notify, in writing, the owner or operator of any facility of intent to terminate a permit. A permit may be terminated for:

(a) noncompliance with any condition of the permit;

(b) noncompliance with any applicable rule;

(c) failure in the application or during the approval or renewal process to disclose fully all relevant facts;

(d) misrepresentation by the owner or operator of any relevant facts at any time; or

(e) a determination that the solid waste activity or facility endangers human health or the environment.

(4) The owner or operator of a facility may appeal any action associated with modification, renewal, or

termination in accordance with Section R315-317-3, Title 63 Chapter 46b, and Rule R315-12.

R315-311-3. Public Comment Period.

(1) The draft permit, permit renewal, or major modification of a permit, for each solid waste facility that requires a permit, shall be subject to a 30-day public comment period.

(2) A public hearing may be held if a request for public hearing is submitted to the Executive Secretary in writing:

(a) by a local government, a state agency, ten interested persons, or a interested association having not fewer than ten members; and

(b) the request is received by the Executive Secretary not more than 15 days after the publication of the public notice.

(3) After due consideration of all comments received, final determination on draft permits or major modification of permits will be made available by public notice.

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R315. Environmental Quality, Solid and Hazardous Waste.

R315-312. Recycling and Composting Facility Standards.

R315-312-1. Applicability.

(1) The standards of Rule R315-312 apply to any facility engaged in recycling or utilization of solid waste on the land including:

- (a) composting;
- (b) utilization of organic sludge, other than domestic sewage sludge and septage, and untreated woodwaste on land for beneficial use; and
- (c) accumulation of wastes in piles for recycling or utilization.

(2) These standards do not apply to:

- (a) animal feeding operations, including dairies, that compost exclusively manure and vegetative material and meet the composting standards of a Comprehensive Nutrient Management Plan;
- (b) other composting operations in which waste from on-site is composted and the finished compost is used on-site; or
- (c) hazardous waste.

(3) These standards do not apply to any facility that recycles or utilizes solid wastes solely in containers, tanks, vessels, or in any enclosed building, including buy-back recycling centers.

(4) The composting of domestic sewage sludge, on the site of its generation, is exempt from the requirements of Rule R315-312 but is regulated under the applicable requirements of Rule R317-8 and 40 CFR 503 by the Utah Division of Water Quality.

(5) Effective dates. An existing facility recycling or composting solid waste shall be placed upon a compliance schedule to assure compliance with the requirements of Rule R315-312 on or before a date established by the Executive Secretary.

R315-312-2. Recycling and Composting Requirements.

(1) Any recycling or composting facility shall meet the requirements of Section R315-302-2, and shall submit a general plan of operation and such other information as requested by the Executive Secretary prior to the commencement of any recycling operation.

(2) Each applicable recycling or composting facility shall submit a certification that the facility has, during the past year, operated according to the submitted plan of operation to the Executive Secretary by March 1 of each year.

(3) Any facility storing materials in outdoor piles for the purpose of recycling shall be considered to be disposing of solid waste if:

- (a) at least 50% of the material on hand at the beginning of a year at the facility has not been shown to have been recycled by the end of that year and any material has been on-site more than two years unless a longer period is approved by the Executive Secretary; or

(b) ground water or surface water, air, or land contamination has occurred or is likely to occur under current conditions of storage.

(c) Upon a determination by the Executive Secretary or his authorized representative that the limits of Subsection R315-312-2(3)(a) or (b) have been exceeded, the Executive Secretary may require a permit application and issuance of a permit as a solid waste disposal facility.

(4) Any recycling or composting facility may be required to provide financial assurance for clean-up and closure of the site as determined by the Executive Secretary.

(5) Tires stored in piles for the purpose of recycling at a tire recycling facility shall be subject to the requirements of Section R315-314-3.

R315-312-3. Composting Requirements.

(1) No new composting facility shall be located in the following areas:

- (a) wetlands, watercourses, or floodplains; or
- (b) within 500 feet of any permanent residence, school, hospital, institution, office building, restaurant, or church.

(2) Each owner or operator of a composting facility, in addition to the operational plan required in Subsection R315-312-2(1), shall develop, keep on file, and abide by a plan that addresses:

- (a) detailed plans and specifications for the entire composting facility including manufacturer's performance data for equipment;
- (b) methods of measuring, grinding or shredding, mixing, and proportioning input materials;
- (c) a description and location of temperature and other types of monitoring equipment and the frequency of monitoring;
- (d) a description of any additive material, including its origin, quantity, quality, and frequency of use;
- (e) special precautions or procedures for operation during wind, heavy rain, snow, and freezing conditions;

(f) estimated composting time duration, which is the time period from initiation of the composting process to completion;

(g) for windrow systems, the windrow construction, including width, length, and height;

(h) the method of aeration, including turning frequency or mechanical aeration equipment and aeration capacity; and

(i) a description of the ultimate use for the finished compost, the method for removal from the site, and a plan for the disposal of the finished compost that can not be used in the expected manner due to poor quality or change in market conditions.

(3) Composting Facility Operation Requirements.

(a) Operational records must be maintained during the life of the facility and during the post-closure care period, which include, at a minimum, temperature

data and quantity and types of material processed.

(b) All waste materials collected for the purpose of processing must be processed within two years or as provided in the plan of operation.

(c) All materials not destined for processing must be properly disposed.

(d) Turning frequency of the compost must be sufficient to maintain aerobic conditions and to produce a compost product in the desired time frame.

(e) During the composting process, the compost must maintain a temperature between 140 and 160 degrees Fahrenheit (60 and 71 degrees Celsius) for a period of not less than seven days.

(f) Hazardous waste or waste containing PCBs shall not be accepted for composting. Any facility utilizing municipal sewage treatment sludge, water treatment sludge, or septage shall require the generator to characterize the sludge and certify that any sludge used is nonhazardous.

(g) If the composting operation will be utilizing domestic sewage sludge, septage, or municipal solid waste:

(i) compost piles or windrows shall be placed upon a surface such as sealed concrete, asphalt, clay, or an artificial liner underlying the pile or windrow, to prevent subsurface soil and potential ground water contamination and to allow collection of run-off and leachate. The liner shall be designed of sufficient thickness and strength to withstand stresses imposed by compost handling vehicles and the compost itself;

(ii) run-off systems shall be designed, installed and maintained to control and collect the run-off from a 25-year storm event;

(iii) the collected leachate shall be treated in a manner approved by the Executive Secretary; and

(iv) run-on prevention systems shall be designed, constructed, and maintained to divert the maximum flow from a 25-year storm event.

(h) If the Executive Secretary determines that a composting operation, which composts materials other than domestic sewage sludge, septage, or municipal solid waste, is likely to produce a leachate that in combination with the hydrologic, geologic, and climatic factors of the site will present a threat to human health or the environment, the Executive Secretary may require the owner or operator of the composting facility to meet the requirements specified in Subsection R315-312-3(3)(g).

(i) The finished compost must contain no sharp inorganic objects and must be sufficiently stable that it can be stored or applied to land without creating a nuisance, environmental threat, or a hazard to health.

(4) Composting Facility Closure and Post-closure Requirements.

(a) Within 30 days of closure, a composting facility shall:

(i) remove all piles, windrows, and any other compost material on the composting facility's property;

(ii) remove or revegetate compacted compost

material that may be left on the land;

(iii) drain ponds or leachate collection system if any, back-fill, and assure removed contents are properly disposed;

(iv) cover if necessary; and

(v) record with the county recorder as part of the record of title, a plat and statement of fact that the property has been used as a composting facility.

(b) The post-closure care and monitoring shall be for five years and shall consist of:

(i) the maintenance of any monitoring equipment and sampling and testing schedules as required by the Executive Secretary; and

(ii) inspection and maintenance of any cover material.

R315-312-4. Requirements for Use on Land of Sewage Sludge, Woodwaste, and Other Organic Sludge.

(1) Any facility using domestic sewage sludge or septage on land is exempt from the requirements of Section R315-312-4 but is regulated under the applicable requirements of Rule R317-8 and 40 CFR 503 by the Utah Division of Water Quality.

(2) Any facility using organic sludge, other than domestic sewage sludge or septage, or untreated woodwaste on land shall comply with the recycling standards of Section R315-312-2.

(3) Only agricultural or silvicultural sites where organic sludge or untreated woodwaste is demonstrated to have soil conditioning or fertilizer value shall be acceptable for use under this subsection, provided that the sludge or woodwaste is applied as a soil conditioner or fertilizer in accordance with accepted agricultural and silvicultural practice.

(4) A facility using organic sludge or untreated woodwaste on the land in a manner not consistent with the requirements of Section R315-312-4 must meet the standards of Rule R315-307.

KEY: solid waste management, waste disposal

October 15, 2003

19-6-105

19-6-108

R315. Environmental Quality, Solid and Hazardous Waste.

R315-313. Transfer Stations and Drop Box Facilities.

R315-313-1. Applicability.

Any transfer station or drop box facility receiving solid waste from off-site shall meet the requirements of Rule R315-313.

R315-313-2. Transfer Station Standards.

(1) Each transfer station shall meet the requirements of Section R315-302-2 and shall submit a plan of operation and such other information as requested by the Executive Secretary for approval prior to construction and operation.

(2) Each transfer station shall be designed, constructed, and operated to:

(a) be surrounded by a fence, trees, shrubbery, or natural features so as to control access and to screen the station from the view of immediately adjacent neighbors, unless the tipping floor is fully enclosed by a building;

(b) be sturdy and constructed of easily cleanable materials;

(c) be free of potential rat harborage, and provide effective means to control rodents, insects, birds, and other vermin;

(d) be adequately screened to prevent blowing of litter and to provide effective means to control litter;

(e) provide protection of the tipping floor from wind, rain, or snow;

(f) have an adequate buffer zone around the active area to minimize noise and dust nuisances, and a buffer zone of 50 feet from the active area to the nearest property line in areas zoned residential;

(g) provide pollution control measures to protect surface and ground waters by the construction of:

(i) a run-off collection and treatment system, if required, must be designed and operated to collect and treat a 25-year storm and equipment cleaning and washdown water; and

(ii) a run-on prevention system to divert a 25-year storm event;

(h) provide all-weather access in all vehicular areas;

(i) provide pollution control measures to protect air quality including a prohibition against all burning and the development of odor and dust control plans to be made part of the plan of operation;

(j) prohibit scavenging;

(k) provide attendants on-site during hours of operation;

(l) have a sign that identifies the facility and shows at least the name of the site, hours during which the site is open for public use, materials not accepted at the facility, and other necessary information posted at the site entrance;

(m) have communication capabilities, if

available in the facility area, to immediately summon fire, police, or emergency service personnel in the event of an emergency; and

(n) remove all wastes at final closure from the facility to another permitted facility.

R315-313-3. Drop Box Facility Standards.

(1) Each drop box facility shall be constructed of durable watertight materials with a lid or screen on top that prevents both the loss of materials during transport and access by rats and other vermin.

(2) Each drop box facility shall be located in an easily identifiable place accessible by all-weather roads.

(3) Each drop box facility shall be designed and serviced as often as necessary to ensure adequate storage capacity at all times. Storage of solid waste outside the drop boxes is prohibited.

(4) Each drop box facility shall have a sign at the entrance that complies with Subsection R315-313-2(2)(l).

(5) The owner or operator of each drop box facility shall remove all remaining wastes at final closure, to a permitted facility and remove the drop box.

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R315. Environmental Quality, Solid and Hazardous Waste.
R315-314. Facility Standards for Piles Used for Storage and Treatment.

R315-314-1. Applicability.

(1) The requirements of Rule R315-314 apply to the following:

- (a) a pile of solid waste containing garbage that has been in place for more than seven days;
- (b) a pile of solid waste which does not contain garbage that has been in place for more than 90 days;
- (c) a pile of material derived from waste tires where more than 1,000 passenger tire equivalents are stored at one site; and
- (d) a pile of whole waste tires where more than 1,000 tires are stored at one site.

(2) The requirements of Rule R315-314 do not apply to the following:

- (a) solid waste stored or treated in piles prior to recycling including compost piles and wood waste;
- (b) solid waste stored in fully enclosed buildings, provided that no liquids or sludge containing free liquids are added to the waste;
- (c) a pile of inert waste, as defined by Subsection R315-301-2(36); and
- (d) a pile of whole waste tires located at a permitted waste disposal facility that is stored for not longer than one year.

(3) A site where crumb rubber, an ultimate product derived from waste tires, or waste tires that have been reduced to materials for beneficial use are stored for not longer than one year may receive a waiver of the requirements of Rule R315-314 from the Executive Secretary on a site specific basis.

(a) No waiver of the requirements of Rule R315-314 will be granted by the Executive Secretary without application from the owner or operator of the storage site.

(b) In granting a waiver of the requirements of Rule R315-314, the Executive Secretary may place conditions on the owner or operator of the storage site as to the sizes of piles, distance between piles, or other operational practices that will minimize fire danger or a risk to human health or the environment.

(c) The Executive Secretary may revoke a waiver of the requirements of Rule R315-314 if the Executive Secretary finds that:

- (i) any condition of the waiver is not met; or
- (ii) the operation of the storage site presents a fire danger or a threat to human health or the environment.

R315-314-2. General Requirements.

(1) Each owner and operator shall:

- (a) comply with the applicable requirements of Section R315-302-2; and
- (b) remove all solid waste from the pile at closure to another permitted facility.

(2) Requirements for Solid Waste Likely to Produce Leachate.

(a) Waste piles shall be placed upon a surface such as sealed concrete, asphalt, clay, or an artificial liner underlying the pile to prevent subsurface soil and potential ground water

contamination and to allow collection of run-off and leachate. The liner shall be designed of sufficient thickness and strength to withstand stresses imposed by pile handling vehicles and the pile itself.

(b) A run-off collection and treatment system shall be designed, installed and maintained to collect and treat a 25-year storm event.

(c) Waste piles having a capacity of greater than 10,000 cubic yards shall have either:

(i) a ground water monitoring system that complies with Rule R315-308; or

(ii) a leachate detection, collection and treatment system.

(iii) For purposes of this subsection, capacity refers to the total capacity of all leachate-generating piles at one facility, e.g., two, 5,000 cubic yard piles will subject the facility to the requirements of this subsection.

(d) A run-on prevention system shall be designed and maintained to divert the maximum flow from a 25-year storm event.

(e) The Executive Secretary may require that the entire base or liner shall be inspected for wear and integrity and repaired or replaced by removing stored wastes or otherwise providing inspection access to the base or liner; the request shall be in writing and cite the reasons including valid ground water monitoring or leachate detection data leading to request such an inspection, repair or replacement.

(3) The length of time that solid waste may be stored in piles shall not exceed one year unless the Executive Secretary determines that the solid waste may be stored in piles for a longer period without becoming a threat to human health or the environment.

(4) The executive secretary or an authorized representative may enter and inspect a site where waste is stored in piles as specified in Subsection R315-302-2(5)(b).

R315-314-3. Requirements for a Waste Tire Storage Facility.

(1) The definitions of Section R315-320-2 are applicable to the requirements for a waste tire storage facility.

(2) No waste tire storage facility may be established, maintained, or expanded until the owner or operator of the waste tire storage facility has obtained a permit from the Executive Secretary. The owner or operator of the waste tire storage facility shall operate the facility in accordance with the conditions of the permit and otherwise follow the permit.

(3) The owner or operator of a waste tire storage facility shall:

(a) submit the following for approval by the Executive Secretary:

(i) the information required in Subsections R315-310-3(1)(a), (b), and (c);

(ii) a plan of operation as required by Subsection R315-302-2(2);

(iii) a plot plan of the storage site showing:

(A) the arrangement and size of the tire piles on the site;

(B) the width of the fire lanes and the type and location of the fire control equipment; and

(C) the location of any on-site buildings and the type of fencing to surround the site;

(iv) a financial assurance plan including the date that the financial assurance mechanism becomes effective; and

(v) a vector control plan;

(b) accumulate tires only in designated areas;

(c) control access to the storage site by fencing;

(d) limit individual tire piles to a maximum of 5,000 square feet of continuous area in size at the base of the pile;

(e) limit the individual tire piles to 50,000 cubic feet in volume or 10 feet in height;

(f) insure that piles be at least 10 feet from any property line or any building and not exceed 6 feet in height when within 20 feet of any property line or building;

(g) provide for a 40 foot fire lane between tire piles that contains no flammable or combustible material or vegetation;

(h) effect a vector control program, if necessary, to minimize mosquito breeding and the harborage of other vectors such as rats or other animals;

(i) provide on-site fire control equipment that is maintained in good working order;

(j) display an emergency procedures plan and inspection approval by the local fire department and require all employees to be familiar with the plan;

(k) establish financial assurance for clean-up and closure of the site:

(i) in the amount of \$150 per ton of tires stored at the site; and

(ii) in the form of a trust fund, letter of credit, or other mechanism approved by the Executive Secretary.

(l) maintain a record of the number of:

(i) tires received at the site;

(ii) tires shipped from the site;

(iii) piles of tires at the site; and

(iv) tires in each pile; and

(m) meet the applicable reporting requirements of Subsection R315-302-2(4).

(4) Whole Tires Stored in a Tire Fence.

(a) Whole tires stored in a tire fence are exempt from Subsections R315-314-3(3)(e), (f), and (g) but must:

(i) obtain a permit from the Executive Secretary as required by Subsections R315-314-3(2);

(ii) receive approval for establishing, maintaining, or expanding the tire fence from the local government and the local fire department and submit documentation of these approvals to the Executive Secretary; and

(iii) maintain the fence no more than one tire wide and eight feet high.

(b) An owner of a tire fence may receive a waiver from the requirements of Subsection R315-314-3(4)(a)(i) if the Executive Secretary receives written notice from the owner of the tire fence on or before November 15, 1999 that documents and certifies that:

(i) the tire fence was in existence prior to October 15, 1999; and

(ii) no tires have been added to the fence after October 14, 1999.

(5) Each tire recycler, as defined by Subsection 19-6-803(19), that stores tires in piles prior to recycling shall comply

with the following requirements:

(a) if the tire recycler documents that the waste tires are stored for five or fewer days, the tire recycler shall:

(i) meet the requirements of Subsections R315-314-3(3)(b) through (g); or

(ii) obtain a waiver from the requirements of Subsection R315-314-3(3)(b) through (g) from the local fire department; or

(b) if the tire recycler does not document that the waste tires are stored for five or fewer days, the tire recycler shall be considered a waste tire storage facility and shall:

(i) meet the requirements of Subsections R315-314-3(2) and (3); and

(ii) the amount of financial assurance required by Subsection R315-314-3(3)(l) shall be \$150 per ton of tires held as the average inventory during the preceding year of operation.

**KEY: solid waste management, waste disposal
July 1, 2001**

**19-6-104
19-6-105
19-6-108**

R315. Environmental Quality, Solid and Hazardous Waste.

R315-315. Special Waste Requirements.

R315-315-1. General Requirements.

(1) If special wastes are accepted at the facility, proper provisions shall be made for handling and disposal. These provisions shall include, where required and approved by the Executive Secretary, a separate area for disposal of the wastes, designated by appropriate signs.

(2) The following wastes are prohibited from disposal at a solid waste disposal facility.

(a) Lead acid batteries must be recycled and otherwise managed in accordance with Sections 19-6-601 through 607.

(b) Used oil must be recycled and otherwise managed in accordance with Rule R315-15.

R315-315-2. Asbestos Waste.

(1) Asbestos waste shall be handled, transported, and disposed in a manner that will not permit the release of asbestos fibers into the air and must otherwise comply with Sections R307-1-4.12 and R307-1-8 and 40 CFR Part 61, Subpart M, 1995 ed.

(2) No transporter or disposal facility shall accept friable asbestos waste unless the waste has been adequately wetted and containerized.

(a) Asbestos waste is adequately wetted when its moisture content prevents fiber release.

(b) Asbestos waste is properly containerized when it is placed in double plastic bags of 6-mil or thicker, sealed in such a way to be leak-proof and air-tight, and the amount of void space or air in the bags is minimized. Asbestos waste slurries must be packaged in leak-proof and air-tight rigid containers if such slurries are too heavy for the plastic bag containers. The Executive Secretary may authorize other proper methods of containment which may include double bagging, plastic-lined cardboard containers, plastic-lined metal containers, or the use of vacuum trucks for the transport of slurry.

(c) All asbestos containers shall be labeled with the name of the waste generator, the location where the waste was generated, and tagged with a warning label indicating that the containers hold asbestos.

(3) Disposal of Asbestos Waste.

(a) Upon entering the disposal site, the transporter of the asbestos waste shall notify the landfill operator that the load contains asbestos by presenting the waste shipment record. The landfill operator will verify quantities received, sign off on the waste shipment record, and send a copy of the waste shipment record to the generator within 30 days.

(b) Upon the receipt of the asbestos waste, the landfill operator shall require that the vehicles that have transported asbestos waste be marked with warning signs as specified in 40 CFR Part 61.149(d)(1)(iii), 1995 ed., which is adopted and incorporated by reference. The operator shall also inspect the loads to verify that the asbestos waste is

properly contained in leak-proof containers and labeled appropriately. The operator shall notify the local health department and the Executive Secretary if the operator believes that the asbestos waste is in a condition that may cause significant fiber release during disposal. If the wastes are not properly containerized, and the landfill operator accepts the load, the operator shall thoroughly soak the asbestos with a water spray prior to unloading, rinse out the truck, and immediately cover the wastes with non-waste material which prevents fiber release prior to compacting the waste in the landfill.

(c) During waste deposition and covering, the operator:

(i) may prepare a separate trench or separate area of the landfill to receive only asbestos waste, or may dispose of asbestos at the working face of the landfill;

(ii) shall place asbestos containers into the trench, separate area, or at the bottom of the landfill working face with sufficient care to avoid breaking the containers;

(iii) within 18 hours, shall completely cover the containerized waste with sufficient care to avoid breaking the containers with a minimum of six inches of material containing no asbestos. If the waste is improperly containerized, it must be completely covered immediately with six inches of material containing no asbestos; and

(iv) shall not compact asbestos containing material until completely covered with a minimum of six inches of material containing no asbestos.

(d) The operator shall provide barriers adequate to control public access. At a minimum, the operator shall:

(i) limit access to the asbestos management site to no more than two entrances by gates that can be locked when left unattended and by fencing adequate to restrict access by the general public; and

(ii) place warning signs at the entrances and at intervals no greater than 200 feet along the perimeter of the sections where asbestos waste is deposited that comply with the requirements of 40 CFR Part 61.154(b), 1995 ed., which is adopted and incorporated by reference; and

(e) close the separate trenches, if constructed, according to the requirements of Subsection R315-303-3(4) with the required signs in place.

R315-315-3. Ash.

(1) Ash Management.

(a) Ash may be recycled.

(b) If ash is disposed, the preferred method is in a permitted ash monofill, but ash may be disposed in a permitted Class I, II, III, or V landfill.

(2) Ash shall be transported in a manner to prevent leakage or the release of fugitive dust.

(3) Ash shall be handled and disposed at the landfill in a manner to prevent fugitive dust emissions.

R315-315-4. Bulky Waste.

Bulky waste such as automobile bodies, furniture,

and appliances shall be crushed and then pushed onto the working face near the bottom of the cell or into a separate disposal area.

R315-315-5. Sludge Requirements.

(1) No water treatment plant sludge, digested waste water treatment plant sludge, or septage containing free liquids may be disposed in any landfill with other solid waste.

(2) Water treatment plant sludge, digested waste water treatment plant sludge, or septage containing no free liquids may be placed at or near the bottom of the landfill working face and covered with other solid waste or other suitable cover material.

(3) Disposal of sludge in a landfill must meet the requirements of Subsection R315-303-3(1).

R315-315-6. Dead Animals.

(1) Dead animals shall be managed and disposed in a manner that minimizes odors and the attraction, harborage, or propagation of insects, rodents, birds, or other animals.

(2) Dead animals may be disposed at the active working face of a permitted landfill or in a separate trench specifically prepared to receive dead animals.

(a) If dead animals are disposed at the active working face of a permitted landfill, the carcasses shall be placed at or near the bottom of the cell and immediately covered with a minimum of two feet of other waste.

(b) If dead animals are disposed in a separate trench, the carcasses shall be completely covered with a minimum of six inches of earth at the end of the working day the carcasses are received.

R315-315-7. PCB Containing Waste.

(1) Any facility that disposes of nonhazardous waste, hazardous waste, or radioactive waste containing PCBs is regulated by Rules R315-301 through 320.

(2) The following waste containing PCBs may be disposed in a permitted Class I, II, III, IV, V, or VI Landfill; permitted incinerator; energy recovery facility; or a facility permitted by rule under Rule R315-318:

(a) waste containing PCBs at concentrations less than 50 ppm as found in situ at the original remediation site as specified by 40 CFR 761.61 (2001);

(b) PCB household waste as defined by 40 CFR 761.3 (2001); and

(c) small quantities, 10 or fewer, of intact, non-leaking small PCB capacitors from fluorescent lights.

(3) Waste containing PCBs at concentrations of 50 ppm, or higher, are prohibited from disposal in a landfill, incinerator, or energy recovery facility that is regulated by Rules R315-301 through 320 except:

(a) the following facilities may receive waste containing PCBs at concentrations of 50 ppm or higher for treatment or disposal:

(i) a facility that began receiving waste prior to July 15, 1993, that is permitted under 40 CFR 761.70, .75 or

.77 (2001) to accept waste containing PCBs; or

(ii) a facility that began receiving waste after July 15, 1993, that is permitted under 40 CFR 761.70, .71, .72, .75, or .77 (2001) to accept waste containing PCBs, which facility must also receive approval under Rules R315-301 through 320; or

(b) when approved by the Executive Secretary, the following wastes may be disposed at an approved unit of a permitted landfill or may be disposed at an incinerator that meets the requirements of Subsection R315-315-7(3)(a)(i) or (ii):

(i) PCB bulk products regulated by 40 CFR 761.62(b) (2001);

(ii) drained PCB contaminated equipment as defined by 40 CFR 761.3 (2001);

(iii) drained PCB articles, including drained PCB transformers, as defined by 40 CFR 761.3 (2001);

(iv) non-liquid cleaning materials remediation wastes containing PCB's regulated by 40 CFR 761.61(a)(5)(v)(A) (2001);

(v) PCB containing manufactured products regulated by 40 CFR 761.62(b)(1)(i) and (ii) (2001); or

(vi) non-liquid PCB containing waste, initially generated as a non-liquid waste, generated as a result of research and development regulated by 40 CFR 761.64(b)(2) (2001).

(c) If a unit of a permitted landfill is approved to receive PCB containing wastes under Subsection R315-315-7(3)(b), the owner or operator of the landfill:

(i) shall modify the approved Ground Water Monitoring Plan to include the testing of the ground water samples for PCB containing constituents at appropriate detection levels; and

(ii) may be required to test the leachate generated at the unit of the landfill under 40 CFR 761.62(b)(2).

R315-315-8. Petroleum Contaminated Soils.

(1) Terms used in Section R315-315-8 are defined in Section R315-301-2. In addition, for the purpose of Section R315-315-8, the following definition applies: "Petroleum contaminated soils" means soils that have been contaminated with either diesel or gasoline or both.

(2) Petroleum contaminated soils that are not a hazardous waste may be accepted for disposal at a:

(a) Class I Landfill;

(b) Class II Landfill;

(c) Class III Landfill; or

(d) Class V Landfill.

(3) Petroleum contaminated soils containing the following constituents at or below the following levels and are otherwise not a hazardous waste, may be accepted for disposal at a Class IV or VI Landfill:

(a) Benzene, 0.03 mg/kg;

(b) Ethylbenzene, 13 mg/kg;

(c) Toluene, 12 mg/kg; and

(d) Xylenes, 200 mg/kg.

R315-315-9. Waste Asphalt.

(1) The preferred management of waste asphalt is recycling. Recycling of waste asphalt occurs when it is used:

(a) as a feedstock in the manufacture of new hot or cold mix asphalt;

(b) as underlayment in road construction;

(c) as subgrade in road construction when the asphalt is above the historical high level of ground water;

(d) under parking lots when the asphalt is above the historical high level of ground water; or

(e) as road shoulder when the use meets engineering requirements.

(2) If waste asphalt is disposed, it shall be disposed in a permitted landfill.

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October 15, 2003

19-6-105

R315. Environmental Quality, Solid and Hazardous Waste.

R315-316. Infectious Waste Requirements.

R315-316-1. Applicability.

(1) The standards of Rule R315-316 apply to:

(a) any health facility as defined by Subsection 19-6-102(10) that generates more than 200 pounds, per month, of infectious waste as defined by Subsection 19-6-102(12);

(b) any transporter that collects and transports more than 200 pounds of infectious waste in any one load; and

(c) a storage, treatment, or disposal facility.

(2) The standards of Rule R315-316 do not apply to a health facility that generates 200 pounds, or less, of infectious waste per month.

(3) All material that has been rendered non-infectious may be handled as non-infectious waste, provided it is not an otherwise regulated hazardous or radioactive waste and is not subject to the requirements of Rule R315-316.

(a) Except for incineration and steam sterilization, no treatment method may be used to render materials non-infectious without receiving approval from the Executive Secretary.

(b) Prior to its use, the Executive Secretary shall make a determination, on a site specific basis, that the proposed treatment method renders materials non-infectious.

(c) The determination shall be based on the results of laboratory tests, submitted by the person proposing the use of the treatment method, meeting the following requirements:

(i) the laboratory tests shall be conducted:

(A) by qualified laboratory personnel;

(B) using recognized microbial techniques;

(C) on samples that have been inoculated with the test organisms, then subjected to the proposed treatment method and processed the same way as will be used in the treatment process if approved; and

(ii) the results of the tests must document that the proposed treatment method inactivates:

(A) vegetative bacteria - *Staphylococcus aureus* (ATCC 6538) or *Pseudomonas aeruginosa* (ATCC 15442) at a 6 Log₁₀ reduction or greater (a 99.9999% reduction or greater of the organism population);

(B) fungi - *Candida albicans* (ATCC 18804), *Penicillium chrysogenum* (ATCC 24791), or *Aspergillus niger* at a 6 Log₁₀ reduction or greater;

(C) viruses - Polio 2, Polio 3, or MS-2 Bacteriophage (ATCC15597-B1) at a 6 Log₁₀ reduction or greater;

(D) parasites - *Cryptosporidium spp.* oocysts or *Giardia spp.* cysts at a 6 Log₁₀ reduction or greater;

(E) mycobacteria - *Mycobacterium terrae*, *Mycobacterium phlei*, or *Mycobacterium bovis* (BCG) (ATCC 35743) at a 6 Log₁₀ reduction or greater; and

(B) Bacterial spores - *Bacillus stearothermophilus*

spores (ATCC 7953) or *Bacillus subtilis* spores (ATCC 19659) at a 4 Log₁₀ reduction or greater (a 99.99% reduction or greater of the organism population).

(iii) The Executive Secretary shall review the submitted materials and reply in writing within 30 days of the receipt of the submittal.

R315-316-2. General Operational Requirements.

(1) Every facility that generates, transports, stores, treats, or disposes of infectious waste must prepare and maintain on file a management plan for the waste that identifies the:

(a) type and estimated quantity of waste generated or handled;

(b) segregation, packaging, and labeling procedures;

(c) collection, storage, and transportation procedures, including the name of the transporter, to be implemented;

(d) treatment or disposal methods that will be used, and disposal facility that will be used; and

(e) person responsible for the management of the infectious waste.

(2) All infectious waste generators and handlers shall report any delivery of unauthorized waste to the local health department immediately upon recognition.

(3) Infectious waste consisting of recognizable human anatomical remains including human fetal remains shall be disposed by incineration or interment.

R315-316-3. Storage and Containment Requirements.

(1) Containment shall be in a manner and location which affords protection from animal intrusion, does not provide a breeding place or a food source for insects and rodents, and minimizes exposure to the public.

(2) Unless all waste is considered infectious and labeled as such, infectious waste shall be segregated by separate containment from other waste at the point of origin.

(3) Except for sharps, infectious waste shall be contained in plastic bags or inside rigid containers. The bags shall be securely tied and the containers shall be securely sealed to prevent leakage or expulsion of solid or liquid wastes during storage, handling, or transport.

(4) Sharps shall be contained for storage, transportation, treatment, and disposal in leak-proof, rigid, puncture-resistant containers which are taped closed or tightly lidded to preclude loss of contents.

(5) All containers used for containment of any infectious waste shall be red or orange, or if containers are not red or orange, shall be clearly identified with the international biohazard sign and one of the following labels: "INFECTIOUS WASTE", "BIOMEDICAL WASTE", or "BIOHAZARD".

(6) If other waste is placed in the same container as regulated infectious waste, then the generator must package, label, and mark the container and its entire contents as

infectious waste.

(7) A rigid infectious waste container may be reused for infectious or non-infectious waste if it is thoroughly washed and decontaminated each time it is emptied or if the surfaces of the container have been completely protected from contamination by disposable, unpunctured, or undamaged liners, bags, or other devices that are removed with the infectious waste, and the surface of the liner has not been damaged or punctured.

(8) Storage and containment areas must protect infectious waste from the elements, be ventilated to the outside, be only accessible to authorized persons, and be marked with prominent warning signs on, or adjacent to, the exterior doors or gates. The warning signs shall contain the international biohazard sign and shall state: "CAUTION -- INFECTIOUS WASTE STORAGE AREA -- UNAUTHORIZED PERSONS KEEP OUT" and must be easily read during daylight from a distance of 25 feet.

(9) If infectious waste is stored longer than seven days, it shall be stored at 40 degrees Fahrenheit (5 degrees Celsius), or below, but must be treated or disposed within 30 days.

(10) Compactors, grinders, or similar devices shall not be used to reduce the volume of infectious waste before the waste has been rendered non-infectious unless the device is contained sufficiently to prevent contamination of the surrounding area.

R315-316-4. Infectious Waste Transportation Requirements.

(1) Infectious waste shall not be transported in the same vehicle with other waste unless the infectious waste is contained in a separate, fully enclosed leak-proof container within the vehicle compartment or unless all of the waste is to be treated as infectious waste in accordance with this section.

(2) Persons manually loading or unloading containers of infectious waste onto or from transport vehicles shall:

(a) be trained in the proper use of protective equipment;

(b) have available and easily accessible at all times puncture resistant gloves and shoes, shatterproof glasses, and coveralls; and

(c) have face shields and respirators available as deemed necessary by the transporter.

(d) Protective gear that becomes soiled shall be decontaminated or disposed as infectious waste.

(3) Surfaces of transport vehicles that have contacted spilled or leaked infectious waste shall be decontaminated by procedures approved by the Executive Secretary.

(4) Transport vehicles transporting infectious waste shall meet all warning requirements of the Department of Transportation.

(5) Each truck, trailer, or semitrailer, or container used for transporting infectious waste shall be so designed

and constructed, and its contents limited so that under conditions normally incident to transportation, there shall be no releases of infectious waste to the environment.

(6) Any truck, trailer, semitrailer, or container used for transporting infectious waste shall be free from leaks, and all discharge openings shall be securely closed during transportation.

(7) No person shall transport infectious waste into the state for treatment, storage, or disposal unless the waste is packaged, contained, labeled and transported in the manner required by this section.

(8) All transporter vehicles shall carry a spill containment and cleanup kit and the transport workers shall be trained in spill containment and cleanup procedures.

R315-316-5. Infectious Waste Treatment and Disposal Requirements.

(1) Infectious waste shall be treated or disposed as soon as possible but not to exceed 30 days after generation, and shall be treated or disposed at a facility with a permit or other form of approval allowing the facility to treat or dispose infectious waste.

(2) Infectious waste may be incinerated in an incinerator.

(a) The incinerator shall comply with the requirements of Rule R315-306 and provide complete combustion of the waste to carbonized or mineralized ash.

(b) A composite sample of the ash and residues from the incinerator shall be taken at least once each year. The sample shall be analyzed by the U.S. EPA Test Method 1311 as provided in 40 CFR Part 261, Appendix II, 1991 ed., Toxic Characteristics Leaching Procedure (TCLP) on parameters determined by the Executive Secretary to determine if it is a hazardous waste. If hazardous, it shall be managed by applicable state regulations.

(3) Infectious waste may be sterilized by heating in a steam sterilizer to render the waste non-infectious.

(a) The operator shall have available and shall certify in writing that he understands written operating procedures for each steam sterilizer, including time, temperature, pressure, type of waste, type of container, closure on container, pattern of loading, water content, and maximum load quantity.

(b) Infectious waste shall be subjected to sufficient temperature, pressure and time to inactivate *Bacillus stearothermophilus* spores in the center of the waste load at a 6 Log₁₀ reduction or greater.

(c) Unless a steam sterilizer is equipped to continuously monitor and record temperature and pressure during the entire length of each sterilization cycle, each package of infectious waste to be sterilized shall have a temperature sensitive tape or equivalent test material, such as chemical indicators, attached that will indicate if the sterilization temperature and pressure have been reached. Waste shall not be considered sterilized if the tape or equivalent indicator fails to indicate that a temperature of at least 250 degrees Fahrenheit (121 degrees Celsius) was

reached during the process.

(d) Each sterilization unit shall be evaluated for effectiveness with spores of *B. stearothermophilus* at least once each 40 hours of operation or each week, whichever is less.

(e) A written log for each load shall be maintained for each sterilization unit which shall contain at a minimum:

(i) the time of day, date, and operator's name;

(ii) the amount and type of infectious waste placed in the sterilizer; and

(iii) the temperature and duration of treatment.

(4) Infectious waste may be discharged to a sewage treatment system that provides secondary treatment of waste but only if the waste is liquid or semi-solid and if approved by the operator of the sewage treatment system.

(5) Infectious waste may be disposed in a permitted Class I, II, or V Landfill. Upon entering the landfill, the transporter of infectious waste shall notify the landfill operator that the load contains infectious waste. The landfill operator shall abide by the following procedures in the disposition and covering of infectious waste:

(a) place the infectious waste containers at the bottom of the working face with sufficient care to avoid breaking them;

(b) completely cover the infectious waste immediately with a minimum of 12 inches of earth or waste material containing no infectious waste; and

(c) not compact the infectious waste until completely covered with 12 inches of earth or waste material containing no infectious waste.

KEY: solid waste management, waste disposal

October 15, 2003

19-6-105

**R315. Environmental Quality, Solid and Hazardous Waste.
R315-317. Other Processes, Variances, and Violations.
R315-317-1. Other Processes, Methods, and Equipment.**

Processes, methods, and equipment other than those specifically addressed in Rules R315-301 through 320 will be considered on an individual basis by the Executive Secretary upon submission of evidence of adequacy to meet the minimum standards of performance to protect human health and the environment as required in Section R315-303-2.

R315-317-2. Variances.

(1) Variances will be granted by the Board only to the extent allowed under Federal law.

(2) Any owner or operator of a solid waste facility may apply to the Board for a variance from any portion of Rules R315-301 through 320 except as specified in Subsection R315-317-2(1). The application shall be accompanied by such information as the Executive Secretary may require. All applications for a variance shall be subject to the public comment requirements of Subsection R315-311-3. The Board may grant such variance, if it finds that:

- (a) the solid waste handling practices or location do not endanger public health, safety, or the environment; and
- (b) the application of, or compliance with, any requirement Rules R315-301 through 320 would cause undue or unreasonable hardship to any person; and
- (c) circumstances of the solid waste disposal site location, operating procedures, or other conditions indicate that the purpose and intent of Rules R315-301 through 320 as well as other state and federal regulations can be achieved without strict adherence to all of the requirements.

(3) If a variance is granted by the Board under Section R315-317-2 for a period longer than one year, the variance shall contain a timetable for coming into compliance and shall be conditioned on adherence to that timetable.

R315-317-3. Violations, Orders, and Hearings.

(1) Whenever the Executive Secretary or his duly appointed representative, determines that any person is in violation of any applicable approved solid waste operation plan or permit or the requirements of Rules R315-301 through 320, the Executive Secretary may cause written notice of violation to be served upon the alleged violators. The notice shall specify the provisions of the plan, permit, or rules alleged to have been violated and the facts alleged to constitute the violation. The Executive Secretary may issue an order that necessary corrective action be taken within a reasonable time or may request the attorney general or the county attorney in the county in which the violation takes place to bring a civil action for injunctive relief and enforcement of the permit requirements or the requirements of Rules R315-301 through 320.

(2) Any order issued pursuant to Subsection R315-317-3(1) shall become final unless, within 30 days after the order is served, the person specified therein files a written request, containing the information specified in Subsection 63-46b-3(3), for agency action before the Board as provided in Section R315-12-3. Title 63 Chapter 46b and Rule R315-12, shall govern the conduct of hearings before the Board.

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19-6-108
19-6-109
19-6-111
19-6-112**

R315. Environmental Quality, Solid and Hazardous Waste.

R315-318. Permit by Rule.

R315-318-1. General Requirements.

(1) Any facility that disposes of solid waste, including incinerators, may be permitted by rule upon application to the Executive Secretary if the Executive Secretary determines the facility is regulated by Federal or state agencies which have regulations or rules as stringent as, or more stringent than, Rules R315-301 through R315-320.

(2) No permit by rule may be granted to a facility that began receiving waste after July 15, 1993 without application to the Executive Secretary.

(3) Any facility permitted by rule is not required to obtain a permit or comply with any other provisions of Rules R315-301 through R315-320 except where operation of the facility may endanger human health or the environment or otherwise violate the provisions of the Solid and Hazardous Waste Act.

R315-318-2. Facilities Permitted by Rule.

(1) The following facilities that began receiving waste prior to July 15, 1993 are permitted by rule:

(a) solid waste disposal and incineration facilities which are required to operate under the conditions of a state or Federal hazardous waste permit or plan approval;

(b) disposal operations or activities which are required to operate under the conditions of a Utah Division of Oil, Gas, and Mining permit or plan approval;

(c) non-commercial underground injection facilities regulated by the Utah Division of Water Quality; and

(d) disposal operations or activities which accept only radioactive waste and are required to operate under the conditions of a Utah Division of Radiation Control permit or plan approval.

(2) An underground storage tank, as defined by 40 CFR 280.12 and Subsection R311-200-1(43), that by meeting the requirements specified in 40 CFR 280.71(b) and Section R311-204-3, is closed in place, may be permitted by rule after meeting the following conditions:

(a) the owner of the underground storage tank shall notify the Executive Secretary of the in place closure; and

(b) the owner of the underground storage tank shall provide documentation to the Executive Secretary that the requirements of Subsection R315-302-2(6) have been met.

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19-6-108

R315. Environmental Quality, Solid and Hazardous Waste.

R315-320. Waste Tire Transporter and Recycler Requirements.

R315-320-1. Authority, Purpose, and Inspection.

(1) The waste tire transporter and recycler requirements are promulgated under the authority of the Waste Tire Recycling Act, Title 19, Chapter 6, and the Solid and Hazardous Waste Act Title 19, Chapter 6, to protect human health; to prevent land, air and water pollution; to conserve the state's natural, economic, and energy resources; and to promote recycling of waste tires.

(2) Except for Subsections R315-320-4(7) and R315-320-5(7), which apply to the application fees for the registration of a waste tire transporter and a waste tire recycler throughout the state, Rule R315-320 does not supersede any ordinance or regulation adopted by the governing body of a political subdivision or local health department if the ordinance or regulation is at least as stringent as Rule R315-320, nor does Rule R315-320 relieve a tire transporter or recycler from the requirement to meet all applicable local ordinances or regulations.

(3) The Executive Secretary or an authorized representative may enter and inspect the site of a waste tire transporter or a waste tire recycler as specified in Subsection R315-302-2(5)(b).

R315-320-2. Definitions.

Terms used in Rule R315-320 are defined in Sections R315-301-2 and 19-6-803. In addition, for the purpose of Rule R315-320, the following definitions apply:

(1) "Demonstrated market" or "market" means the legal transfer of ownership of material derived from waste tires between a willing seller and a willing buyer meeting the following conditions:

(a) total control of the material derived from waste tires is transferred from the seller to the buyer;

(b) the transfer of ownership and control is an "arms length transaction" between a seller and a buyer who have no other business relationship or responsibility to each other;

(c) the transaction is done under contract which is documented and verified by orders, invoices, and payments; and

(d) the transaction is at a price dictated by current economic conditions.

(e) The possibility or potential of sale does not constitute a demonstrated market.

(2) "Vehicle identification number" means the identifying number assigned by the manufacturer or by the Utah Motor Vehicle Division of the Utah Tax Commission for the purpose of identifying the vehicle.

(3) "Waste tire generator" means a person, an individual, or an entity that may cause waste tires to enter the waste stream. A waste tire generator may include:

(a) a tire dealer, a car dealer, a trucking company, an owner or operator of an auto salvage yard, or other

person, individual, or entity that removes or replaces tires on a vehicle; or

(b) a tire dealer, a car dealer, a trucking company, an owner or operator of an auto salvage yard, a waste tire transporter, a waste tire recycler, a waste tire processor, a waste tire storage facility, or a disposal facility that receives waste tires from a person, an individual, or an entity.

R315-320-3. Landfilling of Waste Tires and Material Derived from Waste Tires.

(1) Disposal of waste tires or material derived from waste tires is prohibited except as allowed by Subsection R315-320-3(2) or (3).

(2) Landfilling of Whole Tires. A landfill may not receive whole waste tires for disposal except as follows:

(a) waste tires delivered to a landfill no more than four whole tires at one time by an individual, including a waste tire transporter; or

(b) waste tires from devices moved exclusively by human power; or

(c) waste tires with a rim diameter greater than 24.5 inches.

(3) Landfilling of Material Derived from Waste Tires.

(a) A landfill, which has a permit issued by the Executive Secretary, may receive material derived from waste tires for disposal.

(b) Except for the beneficial use of material derived from waste tires at a landfill, material derived from waste tires shall be disposed in a separate landfill cell that is designed and constructed, as approved by the Executive Secretary, to keep the material in a clean and accessible condition so that it can reasonably be retrieved from the cell for future recycling.

(4) Reimbursement for Landfilling Shredded Tires.

(a) The owner or operator of a permitted landfill may apply for reimbursement for landfilling shredded tires as specified in Subsection R315-320-6(1).

(b) To receive the reimbursement, the owner or operator of the landfill must meet the following conditions:

(i) the waste tires shall be shredded;

(ii) the shredded tires shall be stored in a segregated cell or other landfill facility that ensures the shredded tires are in a clean and accessible condition so that they can be reasonably retrieved and recycled at a future time; and

(iii) the design and operation of the landfill cell or other landfill facility has been reviewed and approved by the Executive Secretary prior to the acceptance of shredded tires.

(5) Violation of Subsection R315-320-3(1), (2), or (3) is subject to enforcement proceedings and a civil penalty as specified in Subsection 19-6-804(4).

R315-320-4. Waste Tire Transporter Requirements.

(1) Each waste tire transporter who transports waste tires within the state of Utah must apply for, receive and maintain a current waste tire transporter registration

certificate from the Executive Secretary.

(2) Each applicant for registration as a waste tire transporter shall complete a waste tire transporter application form provided by the Executive Secretary and provide the following information:

- (a) business name;
- (b) address to include:
 - (i) mailing address; and
 - (ii) site address if different from mailing address;
- (c) telephone number;
- (d) list of vehicles used including the following:
 - (i) description of vehicle;
 - (ii) license number of vehicle;
 - (iii) vehicle identification number; and
 - (iv) name of registered owner;
- (e) name of business owner;
- (f) name of business operator;
- (g) list of sites to which waste tires are to be transported;
- (h) liability insurance information as follows:
 - (i) name of company issuing policy;
 - (ii) amount of liability insurance coverage; and
 - (iii) term of policy.

(3) A waste tire transporter shall demonstrate financial responsibility for bodily injury and property damage, including bodily injury and property damage to third parties caused by sudden or nonsudden accidental occurrences arising from transporting waste tires. The waste tire transporter shall have and maintain liability coverage for sudden or nonsudden accidental occurrences in the amount of \$300,000.

(4) A waste tire transporter shall notify the Executive Secretary of:

- (a) any change in liability insurance coverage within 5 working days of the change; and
- (b) any other change in the information provided in Subsection R315-320-4(2) within 20 days of the change.

(5) A registration certificate will be issued to an applicant following the:

- (a) completion of the application required by Subsection R315-320-4(2);
- (b) presentation of proof of liability coverage as required by Subsection R315-320-4(3); and
- (c) payment of the fee as established by the Annual Appropriations Act.

(6) A waste tire transporter registration certificate is not transferable and shall be issued for the term of one year.

(7) If a waste tire transporter is required to be registered by a local government or a local health department:

- (a) the waste tire transporter may be assessed an annual registration fee by the local government or the local health department not to exceed to the following schedule:
 - (i) for one through five trucks, \$50; and
 - (ii) \$10 for each additional truck;
- (b) the Executive Secretary shall issue a non-

transferable registration certificate upon the applicant meeting the requirements of Subsections R315-320-4(2) and (3) and shall not require the payment of the fee specified in Subsection R315-320-4(5)(c), if the fee allowed in Subsection R315-320-4(7)(a) is assessed; and

(c) the registration certificate shall be valid for one year.

(8) Waste tire transporters storing tires in piles must meet the requirements of Rule R315-314.

(9) Reporting Requirements.

(a) Each waste tire transporter shall submit a quarterly activity report to the Executive Secretary. The activity report shall be submitted on or before the 30th of the month following the end of each quarter.

(b) The activity report shall contain the following information:

(i) the number of waste tires collected at each waste tire generator, including the name, address, and telephone number of the waste tire generator;

(ii) the number of tires shall be listed by the type of tire based on the following:

(A) passenger/light truck tires or tires with a rim diameter of 19.5 inches or less;

(B) truck tires or tires ranging in size from 7.50x20 to 12R24.5; and

(C) other tires such as farm tractor, earth mover, motorcycle, golf cart, ATV, etc.

(iii) the number or tons of waste tires shipped to each waste tire recycler or processor for a waste tire recycler, including the name, address, and telephone number of each recycler or processor;

(iv) the number of tires shipped as used tires to be resold;

(v) the number of waste tires placed in a permitted waste tire storage facility; and

(vi) the number of tires disposed in a permitted landfill, or put to other legal use.

(c) The activity report may be submitted in electronic format.

(10) Revocation of Registration.

(a) The registration of a waste tire transporter may be revoked upon the Executive Secretary finding that:

(i) the activities of the waste tire transporter that are regulated under Section R315-320-4 have been or are being conducted in a way that endangers human health or the environment;

(ii) the waste tire transporter has made a material misstatement of fact in applying for or obtaining a registration as a waste tire transporter or in the quarterly activity report required by Subsection R315-320-4(9);

(iii) the waste tire transporter has provided a recycler with a material misstatement of fact which the recycler subsequently used as documentation in a request for partial reimbursement under Section 19-6-813;

(iv) the waste tire transporter has violated any provision of the Waste Tire Recycling Act, Title 19 Chapter 6, or any order, approval, or rule issued or adopted under the

Act;

(v) the waste tire transporter failed to meet or no longer meets the requirements of Section R315-320-4;

(vi) the waste tire transporter has been convicted under Subsection 19-6-822; or

(vii) the waste tire transporter has had the registration from a local government or a local health department revoked.

(b) Registration will not be revoked for submittal of incomplete information required for registration or a reimbursement request if the error was not a material misstatement.

(c) For purposes of Subsection R315-320-4(10)(a), the statements, actions, or failure to act of a waste tire transporter shall include the statements, actions, or failure to act of any officer, director, agent or employee of the waste tire transporter.

(d) The administrative procedures set forth in Rule R315-12 shall govern revocation of registration.

R315-320-5. Waste Tire Recycler Requirements.

(1) Each waste tire recycler requesting the reimbursement allowed by Subsection 19-6-809(1), must apply for, receive, and maintain a current waste tire recycler registration certificate from the Executive Secretary.

(2) Each applicant for registration as a waste tire recycler shall complete a waste tire recycler application form provided by the Executive Secretary and provide the following information:

(a) business name;

(b) address to include:

(i) mailing address; and

(ii) site address if different from mailing address;

(c) telephone number;

(d) owner name;

(e) operator name;

(f) description of the recycling process;

(g) proof that the recycling process described in Subsection R315-320-5(2)(f) is being conducted at the site or that the recycler has the ability to conduct the process at the site;

(h) estimated number of tires to be recycled each year; and

(i) liability insurance information as follows:

(i) name of company issuing policy;

(ii) proof of the amount of liability insurance coverage; and

(iii) term of policy.

(3) A waste tire recycler shall demonstrate financial responsibility for bodily injury and property damage, including bodily injury and property damage to third parties caused by sudden or nonsudden accidental occurrences arising from storing and recycling waste tires. The waste tire recycler shall have and maintain liability coverage for sudden or nonsudden accidental occurrences in the amount of \$300,000.

(4) A waste tire recycler shall notify the Executive

Secretary of:

(a) any change in liability insurance coverage within 5 working days of the change; and

(b) any other change in the information provided in Subsection R315-320-5(2) within 20 days of the change.

(5) A registration certificate will be issued to an applicant following the:

(a) completion of the application required by Subsection R315-320-5(2);

(b) presentation of proof of liability coverage as required by Subsection R315-320-5(3); and

(c) payment of the fee as established by the Annual Appropriations Act.

(6) A waste tire recycler registration certificate is not transferable and shall be issued for a term of one year.

(7) If a waste tire recycler is required to be registered by a local government or a local health department:

(a) the waste tire recycler may be assessed an annual registration fee by the local government or local health department according to the following schedule:

(i) if up to 200 tons of waste tires are recycled per day, the fee shall not exceed \$300;

(ii) if 201 to 700 tons of waste tires are recycled per day, the fee shall not exceed \$400; or

(iii) if over 700 tons of waste tires are recycled per day, the fee shall not exceed \$500.

(b) The Executive Secretary shall issue a non-transferable registration certificate upon the applicant meeting the requirements of Subsections R315-320-5(2) and (3) and shall not require the payment of the fee specified in Subsection R315-320-5(5)(c), if the fee allowed by Subsection R315-320-5(7)(a) is assessed.

(c) The registration certificate shall be valid for one year.

(8) Waste tire recyclers must meet the requirements of Rule R315-314 for waste tires stored in piles.

(9) Revocation of Registration.

(a) The registration of a waste tire recycler may be revoked upon the Executive Secretary finding that:

(i) the activities of the waste tire recycler that are regulated under Section R315-320-5 have been or are being conducted in a way that endangers human health or the environment;

(ii) the waste tire recycler has made a material misstatement of fact in applying for or obtaining a registration as a waste tire recycler;

(iii) the waste tire recycler has made a material misstatement of fact in applying for partial reimbursement under Section 19-6-813;

(iv) the waste tire recycler has violated any provision of the Waste Tire Recycling Act, Title 19 Chapter 6, or any order, approval, or rule issued or adopted under the Act;

(v) the waste tire recycler has failed to meet or no longer meets the requirements of Subsection R315-320-5(1);

(vi) the waste tire recycler has been convicted under Subsection 19-6-822; or

(vii) the waste tire recycler has had the registration from a local government or a local health department revoked.

(b) Registration will not be revoked for submittal of incomplete information required for registration or a reimbursement request if the error was not a material misstatement.

(c) For purposes of Subsection R315-320-5(9)(a), the statements, action, or failure to act of a waste tire recycler shall include the statements, actions, or failure to act of any officer, director, agent, or employee of the waste tire recycler.

(d) The administrative procedures set forth in Rule R315-12 shall govern revocation of registration.

R315-320-6. Reimbursement for Recycling Waste Tires.

(1) No partial reimbursement request submitted by a waste tire recycler for the first time, or the first time a specific recycling process or a beneficial use activity is used, shall be approved by a local health department under Section 19-6-813 until the local health department has received from the Executive Secretary a written certification that the Executive Secretary has determined the processing of the waste tires is recycling or a beneficial use. If the reimbursement request contains sufficient information, the Executive Secretary shall make the recycling or beneficial use determination and notify the local health department in writing within 15 days of receiving the request for determination.

(2) No partial reimbursement may be requested or paid for waste tires that were generated in Utah and recycled at an out-of-state location except as allowed by Subsection 19-6-809(1)(a)(ii)(C) or (D).

(3) In addition to any other penalty imposed by law, any person who knowingly or intentionally provides false information required by Section R315-320-5 or Section R315-320-6 shall be ineligible to receive any reimbursement and shall return to the Division of Finance any reimbursement previously received that was obtained through the use of false information.

R315-320-7. Reimbursement for the Removal of an Abandoned Tire Pile or a Tire Pile at a Landfill Owned by a Governmental Entity.

(1) A county or municipality applying for payment for removal of an abandoned tire pile or a tire pile at a county or municipal owned landfill shall meet the requirements of Section 19-6-811.

(2) Determination of Reasonability of a Bid.

(a) The following items shall be submitted to the Executive Secretary when requesting a determination of reasonability of a bid as specified in Subsections 19-6-811(3) and (4):

(i) a copy of the bid;

(ii) a letter from the local health department stating

that the tire pile is abandoned or that the tire pile is at a landfill owned or operated by a governmental entity; and

(iii) a written statement from the county or municipality that the bidding was conducted according to the legal requirements for competitive bidding.

(b) The Executive Secretary will review the submitted documentation in accordance with Subsection 19-6-811(4) and will inform the county or municipality if the bid is reasonable.

(c) A determination of reasonability of the bid will be made and the county or municipality notified within 30 days of receipt of the request by the Executive Secretary.

(d) A bid determined to be unreasonable shall not be deemed eligible for reimbursement.

(3) If the Executive Secretary determines that the bid to remove waste tires from an abandoned waste tire pile or from a waste tire pile at a landfill owned or operated by a governmental entity is reasonable and that there are sufficient monies in the trust fund to pay the expected reimbursements for the transportation, recycling, or beneficial use under Section 19-6-809 during the next quarter, the Executive Secretary may authorize a maximum reimbursement of:

(a) 100% of a waste tire transporter's or recycler's costs allowed under Subsection 19-6-811(2) to remove the waste tires from the waste tire pile and deliver the waste tires to a recycler if no waste tires have been added to the waste tire pile after June 30, 2001; or

(b) 60% of a waste tire transporter's or recycler's costs allowed under Subsection 19-6-811(2) to remove the waste tires from the waste tire pile and deliver the waste tires to a recycler if waste tires have been added to the waste tire pile after June 30, 2001.

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